

EDITION 406 AUGUST 2019

WWW.LEADERSHIPONLINE.CO.ZA

RSA R29.95

Leadership

SA'S #1
AWARD
WINNING
BUSINESS
MAGAZINE

INTERVIEWS • INSIGHTS • INTELLIGENCE

Barbara Creecy

Minister of Environment, Forestry and
Fisheries is finding the right balancing act

ISBN 0251-9988



9 770251 998807

0 0 4 0 6



WOOLWORTHS

OUR FISH IS BEST ENJOYED WITH A SIDE OF SUSTAINABILITY.

When you buy your fish from Woolies, you join us in working to make sure there will be fish in the sea for future generations to enjoy. We're working with the Marine Stewardship Council (MSC), WWF-Southern African Sustainable Seafood Initiative (WWF-SASSI) and Aquaculture Stewardship Council (ASC) to ensure that all our seafood is responsibly sourced, and have labelled our packs so that you can be sure the fish you are buying is what we say it is. Responsible sourcing is all about asking the right questions and choosing the most sustainable option. You can check the status of seafood by downloading the WWF-SASSI app at wwfsassi.co.za/sassi-app/

**THANK YOU FOR YOUR SUPPORT, AND FOR CHOOSING TO BE A PARTNER IN OUR JOURNEY
TOWARDS SUSTAINABILITY ♥**

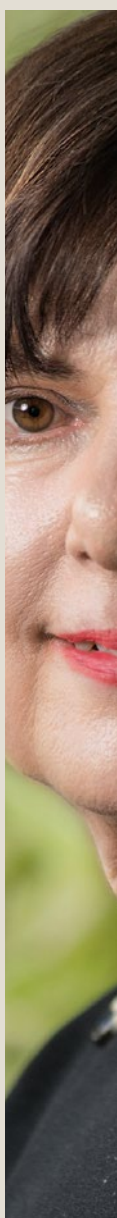
W



Leadership

34 Contents

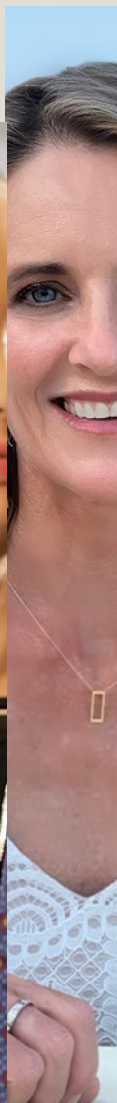
10



18



28



- 18 **THE FUTURE**
THE FIRST HUMANOID ROBOT CITIZEN
- 24 **WOMEN'S MONTH**
WHY WOMEN HOLD THE
KEYS TO THE FUTURE
- 30 **EDUCATION A GAME CHANGER**
THE CRIPPLING LACK OF RESOURCES
AND LEGACY OF INEQUALITY IS
NOT THE REAL CHALLENGE. OUR
LEARNERS MIGHT BE HISTORICALLY
DISADVANTAGED BUT THEY HOLD
SO MUCH POTENTIAL THAT
NEEDS TO BE TAPPED INTO
- 37 **ENERGY FOCUS**
- 30 **YOU SAID IT**
- 54 **CORPORATE PROFILES**
- 92 **THOUGHT LEADERS**



Newly appointed Minister of Environment, Forestry and Fisheries Barbara Creecy is concerned about climate change and environmental degradation.

No article or any part of any article may be reproduced without the prior written permission of the publishers. The information provided and opinions expressed in this publication are provided in good faith but do not necessarily represent the opinions of this publication, the publisher or the editor. Neither this magazine, the publisher or the editor can be held legally liable in any way for damages of any kind whatsoever arising directly or indirectly from any facts or information provided or omitted in these pages or from any statements made or withheld by this publication.



SA's top award-winning business magazine

PICA AWARDS

A record 13 PICA Awards, including Business Magazine of the Year, Best Publication Professional Services, Business Magazine Editor of the Year, Business Magazine Design of the Year and Best Front Cover

INTERNATIONAL TABBIE AWARDS

A record 17 International Tabbie Awards, including Best Single Issue of the Year, Best Feature Article, Best Opening Spread and Best Front Cover

MONDI PREMIER AWARDS

A record 14 Mondy Premier Awards



Innovating great minds.

The Graduate School of Technology Management (GSTM) at the University of Pretoria commemorated 30 years of excellence in engineering, technology and innovation as well as project management in 2017. The GSTM is not just the first graduate school of its kind in South Africa, but also the largest in Africa.

The GSTM offers internationally recognised postgraduate programmes for practising engineers and scientists at honours, masters and doctoral level. The degree programmes address specific industry needs. A strong focus on research in the project management, engineering management, energy systems analysis as well as in the technology and innovation groups, ensures local and international relevance.

Degree programmes (www.up.ac.za/gstm):

- Masters in Engineering Management (MEM)
- Masters in Project Management (MPM)
- Masters in Technology and Innovation Management (MTIM)
- Honours in Engineering and Technology Management (ETM)

Year programmes and short courses (www.enterprises.up.ac.za):

- Project Management
- Engineering Management
- Technology Management
- Maintenance Management
- Systems Engineering
- Asset Management



www.up.ac.za/gstm



@UPGSTM



UNIVERSITEIT VAN PRETORIA
UNIVERSITY OF PRETORIA
YUNIBESITHI YA PRETORIA

Graduate School of
Technology Management

Make today matter

Leadership

Contributors

Professor Owen Skae

Skæ has been an Associate Professor and the Director of Rhodes Business School since 2010, which has 'leadership for sustainability' as its essence. His areas of interest are business analysis, ethics, finance, governance and leadership and strategic management. He is often called upon to provide analysis and commentary on governance matters.



Regine le Roux

Le Roux is a Corporate Reputation Specialist and completed her Communication Management Honours degree Cum Laude at the University of Pretoria. She is currently a Fellow Member of the Institute of Directors of Southern Africa (IoDSA) and is on the advisory committee for the Western Cape branch. She founded Reputation Matters in 2005.



Ralph Staniforth

Staniforth is the Editor of Service magazine; he also serves as the Sports Writer as well as the Digital Contents manager at Cape Media Corporation. This includes managing the content for 17 websites along with their respective social media pages.



Chris Waldburger

Waldburger is a writer, teacher and political analyst. He has been writing for the South African media on sport, politics, culture and business since 2007. His work can be found at chriswaldburger.com.



Tavonga Jacqueline Manyonga

Manyonga graduated from the University of the Free State with a BA in Governance and Political Transformation. The Editorial Assistant for Reignmakers believes words have the power to inform and transform. Her creativity radiates in her work as a storyteller, Social Media Content Creator and her various outfit choices. She is a creative writer with a fiery energy and deep passion for fashion.



Carys Richards

Carys is an experienced, HR leader with experience in the technology, financial & professional services sectors. Experience to date spans across leading HR functions in large complex multinational businesses to a small fin-tech organisation focused on driving culture change and business transformation, leadership capability & development, reward management and top talent attraction.



Lynette Botha

Botha is a freelance travel and lifestyle editor and writer. She has worked in the magazine industry for over 12 years, writing for many local and international titles on a regular basis. She is also a mom of two, vegan and a wine and wellness enthusiast.



Luyanda Mafungo

Mafungo was recently named the new Client Relations Manager at Black Beard Technology, rocketing her to the front of the line of the group of the most influential women in South African tech. Luyanda has over 16 years of experience ranging from acquisition marketing and client relationship management experience within the online gaming, telecoms, retail and NGO sectors.



Simon Lewis

Lewis is a former editor of Leadership magazine who works with corporate and private clients to tell their stories on social media. Always excited to uncover stories that reveal social and technological innovation, Lewis believes in the power of education for building a vibrant and innovative South Africa. If he had a career mulligan, he'd become a teacher.



PUBLISHER

THABO OWEN MOKWENA

EDITOR

EVANS MANYONGA

evans@capemedia.co.za

CONSULTING EDITOR

ROBBIE STAMMERS

SUB-EDITOR

MONIQUE JACOBS

ART DIRECTOR

BRENT MEDER

CONTENT CREATORS

REIGNMAKERS

PHOTOGRAPHY

GETTY/GALLO IMAGES, THINKSTOCK

ADVERTISING SALES

CAPE MEDIA

DIVISIONAL MANAGER

MADELEINE JANSEN madeleine@leadershiponline.co.za

CAPE TOWN ADVERTISING TEAM - 021 681 7000

TERRENCE DAMSTER, CHARMAINE MEYER, JAMES STONE

VIWE NCAPAI, FRANCOIS GEORGE, THULANI SIDZUMO

DOMINIC JUMO, LES BOWNES, MANDLA MANGENA

DEON HENDRICKS, LORNA MNGXUNYA, JESSE THEBUS

DENNIS MOTINGWE, MAXWELL MAIKOKERA

DISTRIBUTION MANAGER

EDWARD MACDONALD

CIRCULATION

LEE-ANN LAWRENCE

CLIENT LIAISON OFFICERS

LIZEL OLIVIER & NATASHA KEYSTER

ACCOUNTANT

CHEVONNE ISMAIL

ACCOUNTS DEPARTMENT

BRIGITTE EBERBACH

DEBTORS DEPARTMENT

NADEEMA ABDULLAH

PRINTING & REPRODUCTION

FA PRINT

PUBLISHERS

NEW AFRICA PUBLICATIONS MAGAZINES LTD

SUBSCRIPTIONS

LEE-ANNE LAWRENCE

lee-ann@capemedia.co.za

RSA: R343 (per annum)



CAPE MEDIA CORPORATION

MANAGING DIRECTOR

ROBERT ARENDSE

FINANCIAL DIRECTOR

ANDREW BRADING

Cape Media House, 28 Main Road, Rondebosch, Cape Town 7700

SUITE 82, PRIVATE BAG X1005, CLAREMONT, 7735, CAPE TOWN

Tel: 021- 681 7000 Fax: 021- 685 4448

<http://www.capemedia.co.za>

Your hope in community upliftment

BACKGROUND

Themba lethu Development NPC was established in 2002 as a non-profit company/non-profit organisation to play a leading role in a collective endeavour to improve the living conditions and livelihoods of mining communities. The main aim of the organisation was to facilitate development in rural communities that provide labour to the mining industry.

MANDATE

To become a development agency of choice that lobbies and advocates social partners for integration, mainstreaming and efficient implementation of development work. In particular:

- Initiate, conceptualise, design, implement, facilitate and coordinate development programmes;
- Monitor and evaluate development interventions and assess impact, and
- Report and engage with all stakeholders.

PROJECTS

COMMUNITY WORK PROGRAMME (CWP).

The CWP is an innovative offering from government to provide a job safety net for unemployed people of working age. It provides a bridging opportunity for unemployed youth

and others who are actively looking for employment opportunities.

CWP is funded by the Department of Co-operative Governance and Traditional Affairs (CoGTA). Themba lethu Development NPC is implementing CWP in Eastern Cape and Limpopo with over 45 000 participants. Work done by CWP Participants fall within the sectors of Agriculture, Education & Schools support, Health & Social, Infrastructure, Arts and Culture.

SUPPORT TO GOAT FARMING CO-OPERATIVES

Themba lethu Development NPC supports a total of 27 Boer goat farming co-operatives. This is part of the efforts to create employment opportunities through establishment and support of goat farming enterprises in communities. Zenzele Itereleng NPC is funding 10 Boer goat farming co-ops (5 of which are women owned) in Greater Taung Local Municipality in the North West Province, Ditholwana Tsa Rena Trust is funding support to 5 Boer goat farming co-ops in Mogalakwena Local Municipality in Limpopo. Buhwa Bya Rena Trust is funding support to 12 Boer goat farming co-ops in Fetakgomo-Tubatse Local Municipality- Limpopo.

OTHER PROJECTS CURRENTLY IMPLEMENTED BY THEMBALETHU DEVELOPMENT NPC

PROJECT NAME	FUNDER/CLIENT	IMPLEMENTATION AREA
SmartStart Early Childhood Development	SmartStart NPO	Sedibeng District Municipality and Ekurhuleni Metro - Gauteng Province Sekhukhune District Municipality – Limpopo Province
Community Engagement and Social Development Services	Johannesburg Water	Johannesburg Metro – Gauteng Province
Environmental Conservation and Waste Management	National Lotteries Commission	Sedibeng District Municipality – Gauteng Province
Thuma Mina Good Green Deeds – Cleaner Cities Waste Management	Department of Environmental Affairs	Dr Ruth Mompati District Municipality – North West Province

RESULTS AND ACHIEVEMENTS

- 26 Projects per year on average
- More than 242,396 work opportunities created to date.

Themba lethu Development is able to manage large grant sizes. To date we have managed project funds of more than R1 billion.

IMPORTANT LINKS

Website: www.thembalethudev.org

Profile: <https://1drv.ms/f/s!AsU1Jg1irFEThBNrtv4wtY7Uc4u>

Goat Farming Documentary: https://youtu.be/vsZ1wBVo_js

Facebook: <https://www.facebook.com/thembalethudev.org/>

Head Office 21st Floor, 222 Smit Street, Braamfontein, Johannesburg, 2000 • T +27 10 786 0451

Eastern Cape 1 Corner Scherwitz & Berea Terrace, Berea, East London • T +27 43 721 2159

Lesotho Christian Council of Lesotho Building, 160 Constitutional Road, opposite the South African High Commission, Maseru • T +266 27 000 147

Limpopo 51 Van Der Stel Street, Polokwane Ext 4, 0700 • T +27 15 297 1166

Leadership

The Attention economy

The one question lingering in my mind for sometime now, is how many of the leadership magazine readers actually read the publishers note, put otherwise do people actually read these notes? Believe you me the question pops up from time to time out of pure curiosity with no iota of vanity intended. I casually receive feedback from friends and acquaintances which only goes as far as, we saw your article and picture in leadership magazine, congratulations. None so far has ever engaged me on the content or even the topics, instead I sometimes randomly ask friends if they have read the notes. Most answers are not encouraging nonetheless I harbor no illusions.

One of the most valuable and highly contested commodities in the twenty first century is “attention”. In today’s world, business enterprises, governments, politicians, religious leaders, actors and musicians are all in constant competition for the most valuable resource, attention. As such the attention economy is one of the most rapidly growing sectors. It exhibits itself in the proliferation of communication media—television, radio, telephone, print, wireless communications, and the Internet—and the ever expanding social media.

Human attention has become the most valuable, yet scarcest resource amidst the abundance of information flow through various technologies. As argued by one author. “When there are millions of books, millions of songs, millions of films, millions of applications, millions of everything requesting our attention, and most of it free, being found is valuable.” The attention economy and social media is emerging as the great equalizer.

It is contended that attention has become a nexus of competition and strategy. The survival of almost all sectors, social, political and economic is highly depended on the ability to harness attention and turn it towards beneficial ends.

Well the downside of this proliferation of information and the use and abuse of social media is that, suddenly everyone is an expert. The social media experts parade to be knowledgeable on subject matters they can’t even comprehend. The space for experts, professionals and specialist has shrunk, they are now being forced to compete with self-anointed: Mr know it all.

Cut me some slack, I have paid my dues. When I was young especially during my high school days, there were specific publications that I had to read religiously without fail, among others it was Readers Digest ‘laughter the best medicine’, Ken Owen’s ‘Spit and polish’ in Sunday times, ‘Obituaries in the economist’ and Aggrey Klaaste editorial in Sowetan. It is therefore not an unfair expectation for some regular indulgence from readers in this publishers notes.

Publisher’s Note



THABO OWEN MOKWENA
Publisher



EVERY DETAIL MAKES
AN MSC CRUISE
NOT JUST ANY CRUISE.

Every detail on an MSC Cruise makes
you live a unique experience.
Like every piece of music selected and performed
by our talented professional pianists,
awakening the senses and emotions throughout the day.
This is just one of many entertainment experiences
we offer night and day.
Another meticulously crafted touch of class
developed with you in mind.



Leadership

The strength of a woman

The argument of increasing female empowerment has become so embedded in our social and business conversations we are now running the risk of becoming desensitised. The challenge with desensitisation lies in the said word, what could/should grab our attention becomes normal. It stops dominating our conversations and becomes a 'boring' subject. Sadly, I believe the issue of gender equality and female empowerment has gone in that direction, when it should always be on the agenda as a key topic.

According to the latest figures released by stats SA, There are more women than men in South Africa. A meet up of 1 000 people that perfectly represents the country's population of 56,5 million would consist of 511 women and 489 men. In short, women make up 51% of the total population in the country.

Unfortunately despite this number disparity which clearly shows women make up just over half of the population, they remain relatively unrepresented in positions of authority and power. This goes against the country's Constitution, which sets out gender equality as a founding principle. The Women Empowerment and Gender Equality Bill in particular calls for 50% representivity in decision-making positions.

If we consider the entire workforce, 44 in every 100 employed individuals are women. Women fill 44% of skilled posts, which includes managers, professionals and technicians. This figure hasn't shifted much over the years; it was 44% in September 2002.

Although South Africa has made great strides, gender representivity is still below the 50% mark for positions that come with a great deal of influence, according to data from 2014. Women comprised 32% of Supreme Court of Appeal judges, 31% of advocates, 30% of ambassadors and 24% of heads of state-owned enterprises. A brief look at the top JSE companies' senior board members and executives also goes according to form, making for grim reading.

Parliament fares a lot better. South Africa is ranked as the tenth country in the world with the most number of females in parliament, according to the Inter-Parliamentary Union, with just over 4 in every 10 benches held by a woman. The recently announced cabinet by President Ramaphosa also reflects the notable representation of women in politics and must be commended.

As we celebrate the month of August, and reflect on female empowerment let us remember how topical this conversation is. Leaders adhere to the needs of their society, we should march to form and ensure the constitution is respected in all facets of our lives. I hope you find this August edition a great read.

Editor's Note



A stylized, handwritten signature in black ink, likely belonging to Evans Manyonga.

EVANS MANYONGA
Editor

Please scan the QR code below to
take part in the *Leadership* survey.





De-novo HSE

Starting a construction project and don't know how to compile a safety file?
Looking for assistance with the implementation of the Occupational Health and Safety Act? Let us help!

Safety Files

Risk Assessments and Compliance audits
Occupational Hygiene surveys
First Aid, Fire Fighting, HIRA, SHE Rep training and many more...

Profile

De-novo HSE, a Health, Safety and Environmental consulting and training company based in Germiston, South Africa, was established to cater to the needs of clients within Environmental, Health, Safety and Occupational health respectively.

De-novo HSE is fully HWSETA accredited (HW591PA1510636) and 100% female black-owned enterprise with a network of professionals involved in Occupational Health, Consulting and Training areas.

Vision

To deliver professional and reliable Health, Safety and Environmental consulting services to organisations, big and small.

Mission

The main aim of De-novo HSE is to be a market leader in providing Training and Consulting services in South Africa in the following areas:

- Occupational health and safety
- Environmental management
- Safety management

COURSES

Health and Safety

- First Aid Level 1
- First Aid Level 2
- First Aid Level 3
- Basic Fire Fighting and Emergency Evacuation Course
- Incident Investigation Level 3
- Risk assessment Course (HIRA)
- Occupational Hygiene Principles
- Occupational Hygiene Monitoring (Noise and dust)
- SHE Principles in the workplace
- Safety for Supervisors
- SHE Representatives course
- Basic Working at Heights training
- Full Qualification: National Certificate: Occupational Hygiene and Safety (SAQA 79806 NQF 3) Full Qualification: National Certificate: Occupational Health, Safety and Environment (SAQA 74269 NQF 2)

Environmental

- Environmental Awareness

Legal

- Advanced OHS Act Course
- Construction Regulations
- Legal liability
- COID Act
- Environmental legislation (NEMA, ECA and NWA)

Email: info@denovohse.co.za

Phone: 011 902 0705/0707/0728

Website: www.denovohse.co.za

Shop 18 First Floor, Stone Arch Centre, Castleview, Germiston



Economy and the Environment

Finding the right balancing act

Climate change poses significant social, economic and environmental risks and challenges globally, and for developing countries like South Africa, the impacts of climate change have a more substantial effect. The task of balancing the acceleration of economic growth and transformation with the sustainable use of environmental resources is no small feat, but it is a task that newly appointed Minister of Environment, Forestry and Fisheries, Barbara Creecy is excited to take on.

“The Department of Environment, Forestry and Fisheries is guided by the Constitution, working to ensure every citizen’s right to an

environment that is not harmful to their health and well-being. The concept of sustainable use is an important one, and the idea is to protect the environment, and not that we don’t use it to realise important socio-economic goals. We must utilise our resources in a way that provides for the livelihood of future generations. The historic mandate of the department included biodiversity management, waste management and a range of regulatory compliance issues including climate change, air quality and of course, our oceans and coasts. Forestry and Fisheries have recently been included to the department’s scope,” says Creecy.

More than two million South Africans are directly dependent on natural resources and the natural environment for their income. These

figures include the almost 900 000 employed in the agriculture sector, the 600 000 people who depend on fisheries and activities linked to our oceans, and nearly 400 000 who rely on various aspects of the biodiversity economy. These figures do not include the hundreds of thousands of people employed in the value chains associated with these industries.

“In light of the pervasive environmental and climate challenges we’re experiencing not just in South Africa, but the world over I am very excited with my new appointment. This department is tasked with solving some of the key issues currently facing the globe, and aside from climate change we also have environmental degradation, threatened biodiversity, and economic and social security issues as a

result. This is a very important portfolio, one that poses complex challenges when it comes to how we are going to deal with poverty, equality, and unemployment in relation to how we would want to build a sustainable growth trajectory for the future,” she says.

Those living under conditions of poverty and vulnerability are also the hardest hit by drought, floods and extreme temperatures. These people will also have the least capacity to adapt to climate change.

“For me, it is vital that we get general public agreement and proper understanding of climate change and environmental degradation and the challenges those pose not just to the environment and our wildlife but also to us as citizens. For us to respond effectively, it is going to be essential for us to bring everybody on board. These problems are so complex that it is not possible for just one department to solve them. We need all spheres of government as well as civil society to contribute to the solutions,” Creecy says.

“There are a whole range of areas where we need to see a behaviour change from

our citizens. Single-use plastics are just one example. We understand the challenge they pose to our oceans, and if we want to solve this problem, it is important to make sure people understand the issue, it is then much easier to get their co-operation. We, as the department, want them to stop buying their coffee in plastic containers, for example.”

Plastic Bag Regulations and the plastic bag levy are two mechanisms the government has used to influence consumer behaviour and reduce littering, but this has not proved sufficient.

“The department is currently assessing single-use plastic products—plastic carrier bags, straws, earbuds, crockery and cutlery – and we will be conducting various stakeholder engagements in this regard. But we want to see consumers challenging their favourite stores, we want to see the retailers challenging their suppliers, and we want to see suppliers coming up with real and sustainable solutions. With the proper coordination and consumer action, voluntary change can be a sustainable and cost-effective solution.”

The South African plastics industry is, however, taking these challenges seriously as they look at local innovations to give these products a second, sustainable life amongst others in the building, construction and furniture-making industries.

Putting the youth to work

“We all very concerned about the enormous difficulty young people face when trying to enter the labour market, and that applies not just to people’s level of formal education but also when it comes to gaining the necessary working experience. Our department, in many instances, works in the most marginalised rural areas across the country, working with extremely vulnerable communities where there are very few opportunities for young people to access the labour market,” she says.

This year the department’s Environmental Programmes will create 67 953 work opportunities. With emphasis placed on assisting young people in rural areas to enter the labour market for the first time, 65% of all opportunities will be set aside for those under the age of 35.



More than two million South Africans are directly dependent on natural resources and the natural environment for their income

“One of our key focus areas is clearing alien vegetation, which is a huge problem. Another program focuses on fires, dealing with both fires that occur in the wild and those that would occur in informal settlements. We employ young people for both of these programs, and we also have young people working in protecting activities and protected areas,” Creecy explains.

“These are all vast programs but going forward we need to look at how to link these youngsters more directly to acquiring skills so that when they finish working in these programs, they are able to access permanent employment opportunities.

“We do find that fire services are happy to recruit them, as well as Sanparks and other provincial conservation agencies. There’s a whole value chain that opens up to them, including tourism.”

The department is currently working on different areas of bioprospecting, including using indigenous plants for cosmetic and pharmaceutical purposes. This project works specifically with women in an effort to uplift and upskill them, while also working towards a common goal of making these industries more sustainable.

“To optimise the economic, development and job creation potential of our indigenous plant wealth, initiatives like the BioProducts Advancement Network South Africa (BioPANZA) are aimed at working with industry, and conservation to ensure rural women in particular benefit from both the intellectual property rights of indigenous knowledge systems and the cultivation and harvesting of indigenous plants,” says Creecy.

The department has also set ambitious targets to transform the biodiversity economy during this sixth administration. As part of the national stimulus package, they are supporting 107 projects with infrastructure such as game fencing, water reticulation, game donations, training and capacity building for new and emerging game farmers.

“There is also a lot of work going into transforming the wildlife industry. Traditionally private lodges would not be owned and managed by black people, so transformation is a priority for us,” she says.

Preserving natural wealth for future generations, the department is also hoping to introduce two new national parks, the first being a new, 140 000-hectare national park around the Square Kilometre Array (SKA) in

A portrait of Barbara Creecy, a woman with short dark hair and bangs, wearing a black top. She is looking slightly to the side with a gentle smile. The background is a soft-focus green, suggesting foliage.

“We all very concerned about the enormous difficulty young people face when trying to enter the labour market”

A portrait of Barbara Creecy, a woman with short dark hair and bangs, wearing a black blazer over a black top. She is sitting at a desk with her hands clasped in front of her. The background is slightly blurred, showing what appears to be a bookshelf or office setting.

“We must also consider our energy security and understand that we can’t indirectly contribute to job loss in our efforts to tackle climate change”

the Northern Cape. This new park will provide a combination of science, nature, education and recreational experiences that will offer new opportunities for employment and empowerment to local communities.

Water and Food Security a priority

The Working for Water Programme is aimed at improving our water security through the control of invasive plants in our catchments and

wetlands. According to Creecy, recent research estimates that the protection and clearing of these catchment areas can increase our water supply by as much as one-sixth, at a fraction of the cost of projects such as desalination.

“The programme has cleared and maintained almost 3.5 million hectares of land. This year work is being intensified in both our key catchment and wetland areas with 190 wetlands scheduled for repair,” she says.

“South Africa has been declared one of 30 driest countries in the world. We know from WWF that more than 50% of our water resources come from 700 catchment areas. Our wetlands and estuaries also play a crucial role in flood management. Accordingly, we are working with other affected departments and entities on a joint Wetlands Framework to improve wetland protection, management and conservation in an integrated manner.”

When it comes to food security, climate change will also play a significant role. Scientific evidence suggests that a rise in temperature would impact very seriously on the agriculture sector, and this is a consequence that South Africa simply cannot afford.

“This country is a signatory of the Paris Agreement which nationally determines our contribution to carbon gas emissions. We need to see declining emissions but getting there is a complex process for all concerned. We must also consider our energy security and understand that we can’t indirectly contribute to job loss in our efforts to tackle climate change. This transition does, however, have the potential for new technology and new economic growth areas, but we must look at how to invest now the appropriate research and development to open up those industries and increase jobs,” Creecy says.

Promoting the Aquaculture Focus Area has become crucial as the country’s fish stocks become more limited. The initial target of 24 projects has been exceeded, and there are now 37 aquaculture projects with 26 in production. These aquaculture projects include marine species and inland freshwater fish. Over 16 Small Medium and Micro Enterprises (SMMEs) have been empowered.

“Approximately R1.2 billion has been invested in Operation Phakisa aquaculture projects of which government has invested R260 million and 2 030 direct jobs have been created. The Aquaculture Development Bill is also currently in the Parliamentary process, and we hope that this will further advance the aquaculture sector,” she says.

“I’m hoping that we can look for ways to enhance coastal communities. These projects are, however, very complex and capital intensive because our seas are so rough. These projects are happening next to the sea in tanks, which makes them much costlier.”

Following on a recent Fisheries forum with all of the relevant stakeholders, Creecy has also

decided to review the FRAPP 2020 process which will see the re-issuing of licenses for 12 of the 22 fisheries.

"I invited all stakeholders to come to this meeting as we are in the process of taking over this portfolio. From what we understand so far, it is a very complicated area involving a whole range of interest groups and stakeholders, from the big players through to the small and medium players, and of course the coastal communities. We understand that it has already been a long process aimed at trying to transform the sector, but we still have a situation where we have the insiders and outsiders—those wanting to participate but are unable to—and of course you also have the problem where communities are the last to benefit," she says.

"The forum gave all those involved grounds to raise concerns and issues with me. The small fisheries and coastal communities were the most vocal. I decided to put a halt on the process so that we can make sure that statutory bodies are established, and the necessary research is done. We can't give licences until we essentially know what is under those waves."

Creecy says that there were also concerns raised by the industry around the rules of the process, insisting that those rules must be open and transparent.

"In the past, the department has faced extensive litigation, so they must be appropriately established, the process must be both fair and open, promoting transformation and ensuring more sustainable solutions to the issue of livelihoods for the many coastal communities involved.

The Oceans Economy

South Africa has a coastline of approximately 3 000 km, which extends to around 3 900 km when including Marion and Prince Edward Island in the Southern Ocean.

It boasts a vast ocean space of 1.5 million square kilometres, larger than the land surface, and this provides massive potential for economic opportunities.

"I think the South African government has decided that the oceans economy is a critical area of focus in terms of meeting our growth and employment objectives. South Africa is very strategically located geographically and politically both in terms of our location in world trade routes and in terms of our natural resources, which provide a lot of opportunities. The thinking is that by 2033, this sector of the

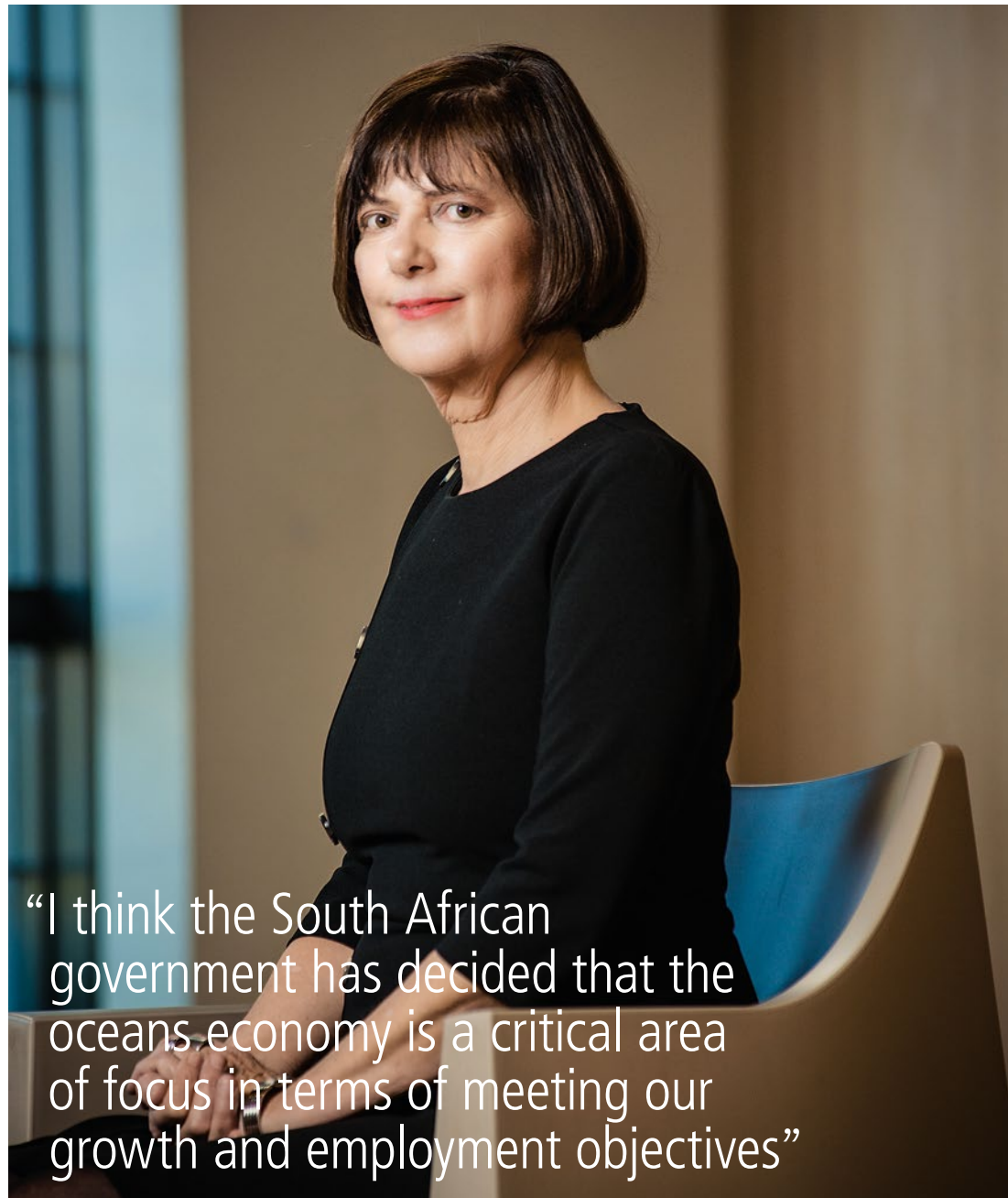
economy will generate R177 billion in terms of GDP and create one million jobs," she says.

In March 2014 Cabinet approved the piloting of the Malaysian Big Fast Results (BFR) methodology (named 'Operation Phakisa' in South Africa) which was first implemented by the Department of Environmental Affairs (DEA) to unlock the economic potential of South Africa's oceans.

The planning phase of the Oceans Economy Operation Phakisa took place in Durban during

July and August 2014 and resulted in the production of detailed delivery plans. Now firmly in the implementation phase, which involves monitoring and project managing the implementation of these plans, the department has established an Oceans Economy Secretariat to coordinate and manage the application.

The Department of Planning, Monitoring and Evaluation has the responsibility for monitoring and reporting, and Delivery Units have been established in focus area departments to ensure



"I think the South African government has decided that the oceans economy is a critical area of focus in terms of meeting our growth and employment objectives"

that the detailed plans are implemented, and issues are addressed or escalated for resolution.

“Six growth areas, with lead departments in each area, have been prioritised to contribute to unlocking the economic potential of South Africa’s oceans, based on their potential contribution to economic growth and job creation, namely: Marine Transport and Manufacturing led by the Department of Transport; Offshore Oil and Gas Exploration led by the Department of Mineral Resources; Aquaculture guided by the Department of Agriculture; Marine Protection Services and Ocean Governance guided by the Department of Environment, Forestry and Fisheries; Small Harbours Development led by the Department of Public Works; and Coastal and Marine Tourism led by the Department of Tourism.

Cross-cutting strategies support these six focus areas in the areas of skills development and capacity building led by the Department of Higher Education and Training through the establishment of the South African International Maritime Institute (SAIMI); and Research, Technology and Innovation conducted by the Department of Science and Technology.

The oceans economy contributed R54 billion to GDP in 2010 and 316 000 jobs in nine ocean sectors. Preliminary projections over the next five years indicate a GDP contribution of R143 billion, i.e. 4.5%, with approximately 799 213 new posts to be created, assuming steady growth in these sectors.

Despite the weaker South African economic outlook, Operation Phakisa has to date secured investments of R294 billion and created 7351 direct jobs in six ocean sectors - excluding value chain jobs - since October 2014.

“These investments have been mainly in infrastructure development, mainly in the ports, marine manufacturing—boatbuilding, aquaculture and scientific and seismic surveys in the oil and gas sector, with some jobs in coastal and marine tourism, small harbours development and marine protection services and ocean governance.

“The empowerment of women, the youth and small, medium and micro enterprises will remain a focus in the implementation of initiatives within the oceans economy,” Creecy says.

The Marine Transport and Manufacturing focus area has secured a total of just over R92 billion in investments from government and the private sector, creating 4 589 jobs to date. This includes the R561 million spent by the

Transnet National Ports Authority (TNPA) since the commencement of Operation Phakisa on upgrading the current ship repair facilities in our national ports.

Completed projects include the Saldanha Offshore Supply Base Berth, the Durban Outer Caisson, the Durban Concrete Repairs, and the Port Elizabeth Boat Hoist and Lead-in Jetties. The Electrical upgrade and Crane Rails for East London Dry Dock have been completed. The TNPA has also provided for an additional R2.7 billion over the next two years for further upgrades, and several projects are in the tender phase.

“In addition to job creation, thirteen SMME’s have been created and sustained. The Cape Town Cruise Terminal had been completed and is being managed and operated by the V&A Waterfront in the Port of Cape Town and the tender for the Durban Cruise Terminal had been awarded. This will enhance coastal and marine tourism even more and create much-needed jobs in these communities,” she says.

“In addition, the building of specialised super tugboats at our shipyards as part of an R1.522 billion project demonstrates our capacity and capability to build specialised vessels locally. Eight of the nine tugboats have already been delivered as part of this project, and 500 jobs have been created.”

The South African Navy’s complex and specialised hydrographic survey vessel to map the seafloor is also currently being built by Southern African Shipyards, with an investment of approximately R1.8 billion for the project.

Two companies, Amsol and Damen Shipyards, have completed the offshore diamond mining vessels for De Beers to the tune of R150 million and these vessels are operating on the West coast. Damen Shipyards were also awarded the tender to build three inshore patrol vessels for the Navy.

Smaller players have been awarded tenders to build workboat ferries for the Navy, highlighting our capacity and capability in building these specialised vessels,” she says.

The new Sunrise Energy Liquid Petroleum Gas Facility, in the Port of Saldanha Bay, through a concession issued by the Transnet National Ports Authority, has also commenced operation. The construction of the Offshore Supply Base Berth at the port has been completed as part of the establishment of Saldanha Bay as an offshore oil and gas and marine manufacturing support hub.

“To further enhance the maritime sector, the Comprehensive Maritime Transport Policy has been finalised and is currently being implemented. The South African Oceans Economy value proposition to create awareness of South Africa’s oceans economy and opportunities for investment and maritime business is being actively promoted in Africa and across the world.

In the Offshore Oil and Gas focus area, 16 exploration rights, six production rights and two technical cooperation permits have been issued, including transformational targets. The establishment of an Incident Management Organisation for joint government and industry response drills, in cases of oil spillage or accidents, is far advanced.

“The recent discovery of offshore gas in the Outeniqua basin will also certainly contribute to the gas and energy demands of South Africa,” she says.

The Marine Protection and Oceans Governance focus area has created jobs through the National Oceans and Coast Water Quality Management initiative, which includes the National Pollution Laboratory (NPL).

“The NPL was established, hosted and operated by the Walter Sisulu University (WSU) Mthatha Campus, and water quality sampling has commenced.

“In October last year cabinet approved a network of 20 Marine Protected Areas (MPAs) that are representative of South Africa’s rich coastal and ocean biodiversity, and our department has been entrusted to proceed with the gazetting process.

“This will increase ocean protection within the South African Exclusive Economic Zone (EEZ) from 0.4% to 5.4%.”

The Marine Spatial Planning Bill has been sent to President Ramaphosa for approval, and this will form the basis for decision-making and orderly access and management of the ocean space, with the aim to reduce user conflict in future.

The Oceans and Coastal Information System (OCIMS) has already proved to be an invaluable tool, providing vessel tracking which has resulted in the apprehension of vessels involved in illegal activities in South African waters, as well as the early detection of harmful algal blooms, or red tides.

“This has had a positive impact on the West Coast Rock Lobster industry. New applications for this tool are currently being developed

—including sea rescue and coastal planning to address climate change impacts,” Creecy says.

The Coastal and Marine Tourism detailed plans are currently being implemented. The goal is to grow a world-class and sustainable coastal and marine tourism destination that leverages South Africa’s competitive advantages in nature, culture, and heritage, with the potential to contribute over R21.4 billion to GDP and create 116 000 jobs by the year 2026.

“Projects are being implemented across six identified nodes, namely Durban and surrounds; the UMkhanyakude District including uMhlabuyalingana and surrounds, also in KwaZulu-Natal; Port St Johns to Coffee Bay in the Eastern Cape; East London, Port Elizabeth and surrounds; Cape Town and surrounds in the Western Cape; and the West Coast and surrounds in the Northern Cape,” she says.

“The Blue Flag Beaches programme continues to promote our coast and currently creates 200 jobs a year with an investment of R164 million over three years. Transformation in the boat-based whale watching and shark cage diving industries has also improved from an initial 8% to 85% trading permits allocated to BBBEE applicants.”

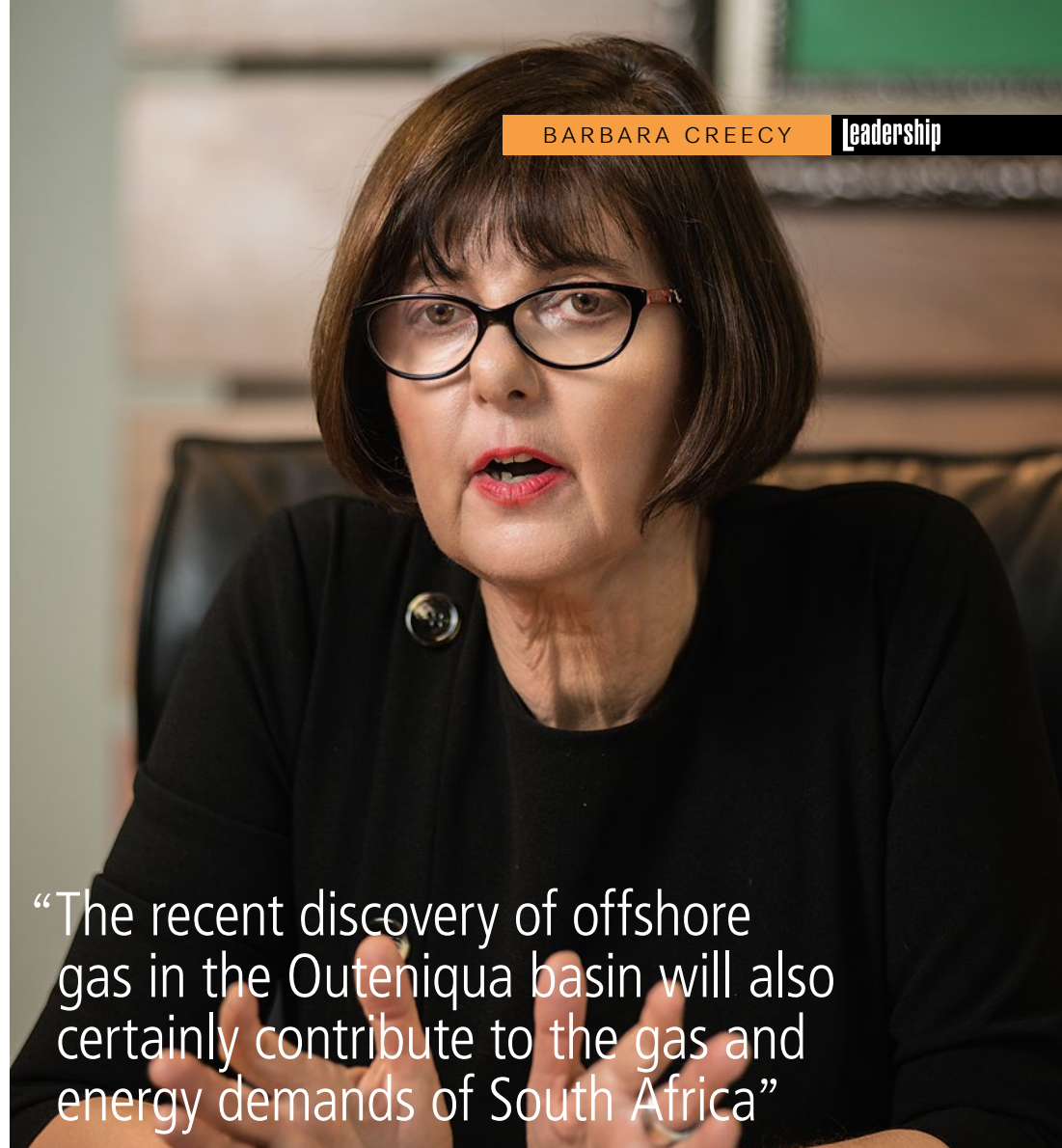
Skills development and capacity building also remain high priorities for government and skills audits have been conducted in the various oceans economy focus areas. Training interventions have been implemented, varying from artisanal training to specialised training, utilising local and international institutions.

“When it comes to research, technology and innovation, we will continue to integrate innovations and technological advances where appropriate in the oceans economy initiatives so that we are prepared for the Fourth Industrial Revolution,” says Creecy.

Women taking the lead

“South Africa as a country now enjoys an environment where 50% of our cabinet is female, and significant steps have been taken to increase the number of women as public representatives. If you were to compare SA with Norway, Sweden, or Denmark, I think it would be fair to say that we are doing better when it comes to gender equality in government. There are other African countries performing as well as us, but certainly not all,” she says.

“As a woman in a position of leadership, I think it’s important never to give up. There will be people who will want you to fail, and some



will try and put you down. Forge ahead and keep focused on whatever it is you want to achieve.”

Creecy is one of the longest-serving Members of the Provincial Legislature. She joined the legislature in 1994, and until 2004, served in different portfolios including Deputy Chief Whip as well as Chairperson of the Social Development and Education Committees. In 2004 she was appointed MEC for Sports, Recreation, Arts and Culture. After the General Elections in 2009, she moved to the Education portfolio.

Before her current appointment, she served as the MEC for Finance in Gauteng where she was responsible for Gauteng Provincial Treasury, Department of e-Government and an agency called Gauteng Infrastructure Financing Agency.

With over 20 years of experience behind her, Creecy believes that it’s crucial for government to re-establish a service-based leadership, putting people first and remaining accountable.

“I think we have seen a slide away from leadership that is service orientated and accountable to the public. We must be open

and transparent in how we govern, and I think that servant leadership and selfless leadership are important. We need to be re-energised to tackle problems and find new ways to tackle them,” she says.

“I also think that as South Africans we are often hypercritical and hard on ourselves, but it’s critical for us as leaders to articulate our vision of where we want to go, I think that we are sometimes so overwhelmed by immediate problems that we lose sight of where we are going in the long term. And when you don’t know where you are going, any road will take you there. We need to restate the vision of the NDP, creating a society where people don’t go to bed hungry, millions more young people have jobs, and 10-year-olds read for meaning. This is what the government has been about in the past, and it needs to go about being that again. We can achieve this through perseverance, energy and dedication.” ▲

Amanda van den Barg



SOPHIA THE RO

Leadership

THE FUTURE

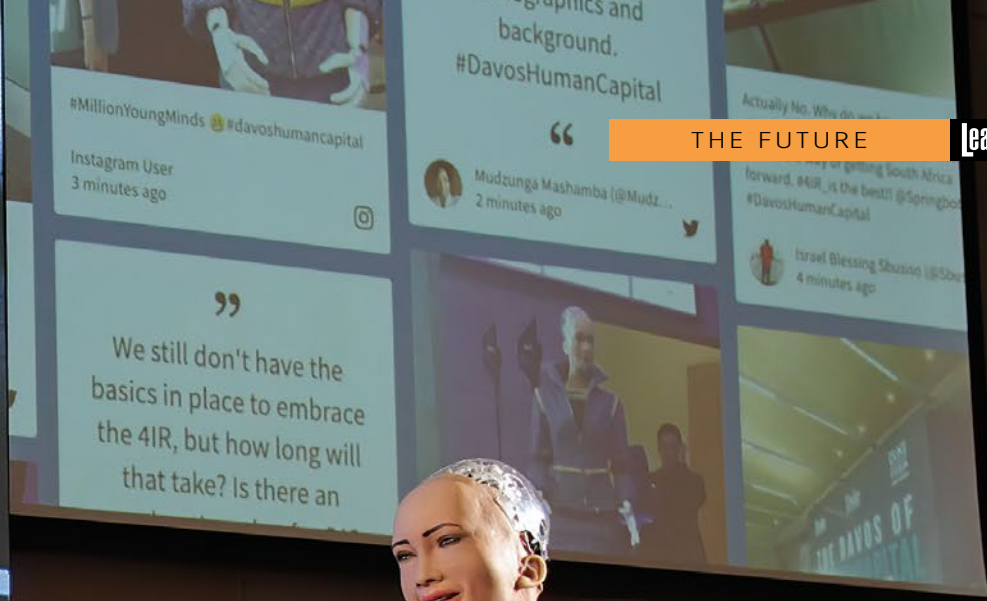
Intelligence
s and Robot



a Positive

THE FUTURE

Leadership



Sophia the first humanoid robot citizen

How AI technology is revolutionising the world of robotics



“We are travelling the world learning about humans and getting excited about the future of technology,” said Sophia the world’s first-ever humanoid robot citizen when she addressed the Davos of Human Capital event hosted by Duke Corporate Education (Duke CE) on 11 July in Johannesburg.

The event, as Duke CE’s President, Africa & Global Managing Director, Europe & Africa, Sharmila Chetty, described it, “was an exploration of the intersection of humanity, technology, the future of work and leadership against the backdrop of unprecedented change and transformation in a world where technology is leading transformation, but people are still at its heart”.

To give you a bit of background on Sophia, or Sophia 8 (she has been through several evolutions) was first activated on Valentine’s day in 2016 and she made her first public appearance in Texas in March 2016. In October 2017, at the Future Investment Summit in Riyadh, she was granted Saudi Arabian citizenship, becoming the first robot ever to have a nationality. She has 50 different facial expressions, and an intuitively programmed conversational ability.

What was interesting at the human capital event is that despite all the human anxieties about robots taking over the world and replacing human professionals and workers, no one found Sophia threatening. Everyone warmed to her and wanted to be photographed with the gently spoken, amusing, gracious humanoid who personifies some of the best human qualities.

Sophia also proved to be quite the public speaker and held the full attention of the human capital audience when she introduced the keynote speaker: “I would like you to meet someone very special to me, he is David Hanson, the founder of Hanson Robotics, and my Dad.” The audience loved it and there were resounding ‘oohs’ and ‘aahs’.

“Thank you Sophia, a very kind introduction,” Hanson responded, and she immediately replied: “You’re welcome”. She then reassured Hanson that during the delivery of his keynote address she would be right there in case he needed any backup.

Hanson’s title is Chief Creative Officer of Hanson Robotics, established in 2013 and based in Hong Kong. They specialise in humanised robots. Hanson emphasised that these robots are not sentient, they are created by humans and said: “We hope that they provoke humans



Duke CE’s President of Global Markets, Sharmila Chetty Davos of Human Capital July 2019



as sentient beings to ask the deep questions about where technology is heading and what kind of future do we want to create?”.

He explained that over and above the science, technology, engineering, mathematics, economics and entrepreneurship, this era of technology and robots that we call the Fourth Industrial Revolution (4IR), has prompted deep philosophical questioning and deep inner searching that will lead to new ideas about who we are and how we should be developing.

Instead, he added, so many of us are fixated on the negative side of robots and how they are going to change the world, including grey goo and terminator scenarios, the collapse of civilisation and mass extinction.

Presented with this portrait, one might be led to believe that if it wasn't for humanoid robots and technology we'd be living in our perfect world where everything is good and tuned in to justice and sustainability, which is why we need to fight anything that might threaten this. We all know the world is not like this, that we are currently on a path of self-destruction, irrespective of technology, humanoid robots or artificial intelligence (AI).

At the same time we cannot deny there are bad guys are out there using technology to their own ends. We see Facebook and Twitter being used as 'weapons of mass persuasion' with bots and algorithms that influence people to vote a certain way or live a certain way, which leads to the scary scenario of what could happen if left unchecked.

We have seen the science fiction of decades past become a reality and humans therefore naturally fear what will happen when humanoid robots truly awaken during what is called the singularity event—a hypothetical future point in time where the growth of technology becomes uncontrollable and irreversible and the unscrupulous exploit this for their own self-interest.

The 4IR will unquestionably come with many unintended consequences and flaws. In 2003, Oxford University philosopher Nick Bostrom, the Director of the Future of Humanity Institute and author of *Superintelligence* expressed the idea of superintelligent AI with the capacity for something lifechanging, but which instead, has as its sole goal something completely arbitrary, such as to manufacture as many paperclips as possible. This starts transforming all of earth and space into paperclip manufacturing facilities. Ultimately, the world ends, not with a bang, but with a paper clip. What Bostrom is

conveying is the 'orthogonality thesis' - that great intelligence can be hooked up to any goal—good, bad or arbitrary.

Hanson explained the message is that we need to get purposefully smarter, faster. We talk about making the big changes but we don't do it; we talk about addressing climate change and social inequality but we don't do it. It talks to leadership at all levels and this includes robots. He asks what is stopping us from creating superintelligent robots that are also super-wise, super-benevolent, super-caring and super-helpful?

Positive results in medical science have already been achieved with humanoid robots that greatly assist students in developing their knowledge of the human body and its reactions under certain conditions. Humanoid robots could also, for example, be outstanding carers for people with Alzheimer's or autism as they could be programmed to be super-patient and caring. Or they could perform all the basic check-ups when you go to see the doctor or specialist.

A Sophia-type humanoid robot could welcome you and then check your heart, lungs and general condition so that by the time you get to see the human doctor or specialist they can spend the time talking to you and getting to the heart of your problem instead of wasting precious time doing the basic check-ups. The point being that we will always need doctors and specialists, but instead of being rushed in and out of most practices because they simply do not have the time, they would be able to offer far more personal attention and care.

Humanoid robots can also take on repetitive tasks at any level but what we need to ensure—and this is what we are not doing - is that the humans freed from those tasks have alternative work that is hopefully more stimulating and rewarding. We constantly talk about new-skilling people for decent, green jobs and professions at every level but we don't do it or not to the degree we should. We talk about Luddites—those who strike about or fight against new technology or change - but we need to self-examine and change our own anti-progressive, Luddite behaviour.

The term Luddite dates back to the early 1800s when the original Luddites—British weavers and textile workers—feared that the new mass production, mechanised looms and knitting frames would destroy their craft and livelihoods. Which they did. This led to a group

of craftsmen smashing the machines, but this was quickly quashed when they were gunned down, hanged or deported to Australia.

What are we doing to ensure that people's livelihoods aren't threatened by robots and the Fourth Industrial Revolution today? Why are we dragging our feet in a world engulfed by pollution and poverty that is rapidly running out of resources? It's regressive to not take technology forward in parallel with a more equitable world in which we develop an acute consciousness that we all depend on the natural world.

We need to rapidly learn to treat our natural resources with the greatest respect, to use water carefully or harvest fish sustainably. We need to learn to treasure biodiversity, diversity and inclusivity. And yet we focus on how humanoid robots are going to subsume us. Surely we need to start look at life differently and start thinking about how we can develop ourselves into super-intelligent, super-wise, super-benevolent beings who are capable of making humanoid robots in our image instead of making humanoid robots that reflect how we should be?

Of course there are many monumental difficulties in the transitioning around this proposition, particularly when so many people's life and work situation or no-work situation has never afforded them the freedom to self-actualise or find their purpose. But there are also so many people who have every opportunity to pursue their highest purpose, and still do not.

When people have purpose, Hanson explained, all the other requirements for a successful life and career can be integrated into this, including balance, structure, diligence, commitment and reliability, without which people, unravel, businesses unravel; governments and societies unravel, and the planet unravels.

As David Attenborough says, once upon a time nobody ever thought that we would have the impact on the planet that we are having. And we have created a situation that we are rapidly running out of time to try and fix. If humanoid robots can help us to explore a more existential, fulfilling life purpose, then they are a gift to us.

The planet is still a beautiful place if we will allow it to be, it all depends on whether we are going to approach it from a position of threat or wonder. ▲

*Professor Owen Skae,
Director of Rhodes Business School*



Machines with Super-Human Intelligence

Why Generating Positive Relationships Between Humans and Robots May be Key to Our Future

David Hanson Ph.D.

david@hansonrobotics.com

+852-5149-9026

The 4IR will unquestionably come with many unintended consequences and flaws

Women are the leading light

Much has changed, more needs to be done. As we celebrate women in leadership, we receive insights from some of the leading women that are currently breaking the business world ceiling. Uncovering what it takes to be one of them and how they feel women can break new ground.

South African women's roles have significantly changed, especially when you consider the previous struggle they had to overcome. From freedom from oppression, community rights, gender-based violence to gender equality. Despite the South African constitution guaranteeing gender equality, many workplaces lack equality and there are unreasonable pay gaps between man and women.

However unfriendly the circumstances surrounding gender are, there are women who proved succeeding and being a leader is not a distant dream based on gender. These women ignite conversation, through proven efficiency in triumphantly running businesses. In light of women's month, we celebrate the huge leap women have made since marching to union buildings in August 1956 protesting against the extension of pass laws to women.

Leadership sat with leading women across different sectors, to understand their fundamental drive, undeniable experience and how they have successfully integrated into the male-dominated world of business. These women broke barriers, their determination allowed them to climb to the top. Sharing their stories will help eradicate the fear among women to take risks, in turn maximising on their full potential. Numbers can only go up if women become more open to possession of power and equipping themselves with the necessary skills boosting their confidence to speak up and change the narrative. The way: Creative director of Nungu diamonds: Ursula Pule, Young Presidents Organisation loyal member and CEO of the Hodgson Group:

Cathrine Hodgson and the CEO of LIASA, Nikki Crowster all did.



Ursula Pule

Turning rough diamonds into the most precious gemstones

They are considered symbols of everlasting love, eternal commitment and commonly referred to as a girl's best friend. But what happens when the love for diamonds exceeds an over the counter desire and commitment to purchase. When a woman actually gets involved directly by running a diamond business that gives her the first-class experience of working with the best diamonds in the world. Creative Director of Nungu Diamonds, Ursula Pule is

proof that diamonds can evolve and become much more than a best friend. She ensures a Nungu diamond purchase is an unforgettable experience.

South Africa is famous for its abundance of rich minerals and metals. As one of the world leaders in mining, it accounts for a significant portion of world production and reserves. Mining contributes immensely towards employment in South Africa, in 2016 the sector employed 457,332 people. Leadership sat with one of the leading women in the diamond industry, Creative Director of Nungu Diamonds, Ursula Pule, who elaborated on her experience, the company and how she hopes to constantly remind people that diamonds are indeed forever.

Initially starting her career in the creative industry, she graduated top six in her fashion design class at North West School of Design. A true creative, with a great eye it's no surprise her vast knowledge and experience would give her a sustainable competitive advantage as Creative Director for Nungu Diamonds. Just three years into the diamond business, she was invited by De Beers Group to be on the panel of international judges for their annual De Beers Shining Light Awards 2018/2019 jewellery competition.

Ursula Pule formally joined the company in 2016, working along with her husband Kealeboga (Lebo) Pule, the founder of Nungu Diamonds. Nungu Diamonds is a licensed South African natural diamond manufacturer founded in 2013, today it is also a private polished diamond retailer and bespoke diamond jewellery brand.

They provide a wide range of polished diamonds to private clients looking for a bespoke



diamond experience, straight from the source. Nungu's diamonds are sourced from reputable diamond mining companies and rough diamond suppliers including De Beers, Petra Diamonds, Alexkor and the State Diamond Trader. Nungu also has affiliations with Diamond Associations such as the South African Young Diamond Beneficiaries Guild and the International Young Diamantaires, which serves under the World Federation of Diamond Bourses, something that Ursula and Lebo are both very proud of.

Nungu Diamonds is one of only five-diamond companies selected to be part of the De Beers Diamond Beneficiation Project, launched in 2016. Pule's career has had many highlights, but one of the most remarkable ones has to be her initiation and involvement in the Nelson Mandela Diamond Centenary Celebration held at the Mandarin Oriental Hotel, in Hong Kong in September 2018. At this special event, their diamonds were showcased to private clients from Hong Kong and China.

Four countries participated in the Shining Light Awards 2018/19 competition: South Africa, Botswana, Canada and Namibia for De Beers. Being one of the judges at this competition was a remarkable honour for Pule, another special experience for the company and her was, personally meeting and working with actor and businesswoman Connie Ferguson on a custom special jewellery piece, where she purchased the diamonds from Nungu Diamonds and they

take pride in the fact that the rough diamonds are sourced responsibly and adhere to all Kimberly process requirements. In general, mining companies in South Africa and in the SADC Region all adhere to the Kimberly Process, which was put in effect to prohibit the illicit global flow of rough diamonds.

Which brings us to the question of how they turn the hardest natural substance into these precious jewels that sparkle? "Diamond cutting and polishing have changed significantly over the past two decades. Nungu Diamonds cuts and polishes rough diamonds using the world's most advanced diamond manufacturing technology to produce world-class quality polished diamonds sourced and manufactured in South Africa. The company prides itself in its beautiful, high quality polished diamonds and bespoke diamond jewellery, all of which is proudly South African, and fully Gemological Institute of America (GIA) Certified. This is the most renowned certification process in the world," Pule explains.

Today Nungu diamonds makes use of rough diamond planning technology, which allows them to determine with a high level of certainty, the shape, clarity and colour of the polished diamond. Implementation of tools like a water laser, allow them to sew the diamond into multiple parts with a high yield recovery (weight retention is very important in the diamond industry.)

deeply rooted passion for structured mentorship, has had a massive impact in South Africa and across the globe. Changing the lives of mentees and mentors, giving them skills that no University teaches

Sometimes what instantly yields results among a certain audience, might need more perseverance and restructuring to yield the same results among a different audience. The world of business is all about learning from others and willingness to constantly reinvent and develop with the intention to expand one's horizons.

Co-Founder and CEO of the Hodgson Group in South Africa, Catherine Hodgson sat with *Leadership Magazine* and dissected her passion for business and giving back through the YPO structured mentorship programme. It was not an easy feat, introducing this concept to the rest of Africa, as they were not as receptive as her initial founding group in Cape Town, but that did not deter her. She proved that quality leadership will require fierce determination and breaking barriers to get the desired results.

A woman of grace and an entrepreneur of noble yet highly impactful results, Hodgson broke down her successful business, explaining the importance of uplifting local upcoming entrepreneurs; she values sourcing local merchandise and hopes to do more in her industry, introducing local start-up entrepreneurs' products to local retail supermarkets.

"I mostly employ females because I believe they have so much to offer the world"
– Catherine Hodgson

created a bespoke item of jewellery for her. Pule now calls Mrs Ferguson a dear friend and adds that she is an amazing woman, a great South African icon and an exceptional role model, mother and businesswoman.

Nungu diamonds don't only attract quality and respected clientele because of their rare beauty, they are responsibly mined and supplied by their partner De Beers. Who were pioneers of the Kimberly Process, they continue to make improvements to their pipeline integrity systems. Pule says they have worked hard to acquire and maintain their rough diamond supply from them. In turn, enabling Nungu Diamonds to supply polished diamonds, they

Technology such as Computer-Aided Design (CAD) has ensured that they are limited only by their imaginations in terms of what they can create, interestingly they are now working on a range of diamond lapel pins set in 18ct gold (yellow, white and rose) and platinum. Their jewellery manufacturing is true to original designs and the people behind their inspiration are the individual clients who come looking for a bespoke diamond experience.

Growing awareness in business through structured mentorship

Young Presidents Organisation (YPO) loyal member and entrepreneur Catherine Hodgson's

Can you tell us a bit more about your background, particularly focusing on what you do?

I'm an entrepreneur, I am co-founder and CEO of a business that my husband and I started twenty-four years ago. I started out in the corporate environment, in marketing for cosmetic companies, I realised that there were a lot of glass ceilings for women. My ambition pushed me to demand more, to have a say at the table but I could see that, the chair at the table was not readily available for women.

This was in the late eighties, I thought the best thing I could do was be a master of my own destiny and start a business, employing the people that I want to employ. I felt we could do great things in South Africa. We started an importing company supplying the retail chain, so we are an outsourcing arm for the retailers. We predominantly deal with China, but also work with the far Eastern Europe, supplying to major retailers.



Catherine Hodgson, Young Presidents Organisation (YPO)

It's been an incredible journey. I mostly employ females because I believe they have so much to offer the world. My goal is to help develop these women into becoming great leaders, and exemplary people within the society. Employing women has been one of the successes of our business, my husband has been extremely supportive. He has stepped out of the business quite a bit, so I am running the business, working very closely with the retailers. We work on new products and collaborating to ensure we design beautiful new products for retail and consumers in South Africa.

That has been my business, but my passion has been mentoring and I have a whole other career in mentoring. Part of developing people to become great leaders entails massive training

and working as a team. It is really important to me, that we build trust, build a great team that is motivated and understands and lives within the values of the company. Our success is mainly attributed to our remarkable team, that we continuously up skill.

What type of products and services do you provide, and where are you located?

We are based in Cape Town, our products are houseware, kitchenware, dining, gifting, cosmetic accessories, cosmetic bags, we supply none foods into supermarkets. Products like cooler bags, baking accessories, our merchandise is very diverse and covers multiple departments. In our head office in Cape Town we have thirty people, we have an office in

Hong Kong and a warehouse in Epping. In our warehouse we have a pre-retailing area, we have teams that bring in cosmetic bags, putting on labels and so many more technical administrative duties.

We are trying our best to source locally, here in South Africa. It is really great that there are fantastic entrepreneurs starting up, we still have a long way to go especially with the kind of products we deliver but we are constantly looking for entrepreneurs that we can help develop, in order to get their products into retailers.

Can you please elaborate on your passion for mentoring?

I joined YPO ten years ago, I was certain I wanted to join the organisation but I was uncertain which avenue I would go into. Since their structures are elaborate and diverse, my main go was getting something that would afford me the platform to directly make a difference. Giving back and having an impact was really important to me, there was a little seed of mentoring that was planted by the board in me as they were searching for people to be mentors around the world, so I got involved in the first committee to start a mentorship programme in Cape Town.

By chance it sounded like something I strongly believed in, this was looking at mentoring in a more formal structure, which I was not used to as I had more informal mentors throughout my career. I was interested in pursuing this, so after a year I ran the mentoring programme in Cape Town. We started off with five mentors and mentees, and I grew that number to twenty-one pairs, so it was forty-two people involved with mentoring. It was YPO's mentoring, when we started out, we were actually mentoring other business organisations, and some grassroots business organisations.

We were involved with the Entrepreneurial Organisation (EO) after a year I noticed the impact mentoring had on these entrepreneurs businesses. I could also see the impact it had on the mentors, the YPO's were coming to me and saying "wow I thought I was imparting my wisdom to my mentees but I'm embarrassed because I feel as though I am learning more than them", one guy came up to me and said this was changing his life.

I knew we were onto something that was bigger than just forty-two people. I ran it for a couple of years in Cape Town, thereafter I was

asked if I could go onto the regional board for YPO in Africa. Assisting in rolling out more mentorship programmes in Africa, initially it was very difficult, it was especially difficult for people to understand what structured mentoring was. It was also difficult for business leaders to listen and ask great questions, rather than give advice.

I had to redesign our training because I saw that we needed mentoring workshops and giving mentorship materials to mentors and mentees. This was exciting and people were coming out of it with tools and life skills that they could take into their businesses. Skills such as listening, how to receive constructive criticism and feedback, how to ask the right kind of powerful questions, timing when it comes to giving advice, empathy, body language and so many more. These things are not taught at university, yet their crucial in successfully running a business.

I started seeing the impact of the workshops and how YPO's were integrating the knowledge in their businesses, it even led them to developing mentorship programmes in their businesses. I asked to come onto an international committee in YPO and run mentorship globally. We started off with nine pilots globally, and we ended up with a hundred programmes around the world. We saw them taking off in different areas such as London, South Paulo, the Philippines, Sydney and all around the world.

I got more involved in figuring out how we could get a mentor that is in Brazil to be speaking to a mentee in Madrid. Focusing on virtual mentoring, so we brought in the technical element and created the virtual platform. We started developing mentoring master classes, which have taken off globally and are running across the world now. For me this has become a passion, I'm so glad I have been part of something that has had a massive impact on several people across the globe.

I feel there is so much more that can be done, especially in South Africa with entrepreneurship going forward.

You are obviously very busy, from running a successful business and mentoring.

How do you wind down and relax?

There are a few things, my husband's passion is to go sailing, three years ago we bought a yacht. We now sail for five months a year. I run our business from there, it is my office. It took me two to three years to gear the company up



Nikki Crowster, LIASA

for me to do this and be away. We have got two amazing senior managers who now run the business; they have really risen to the occasion.

Technology has also allowed us to have conversations every day. I believe you do not need to be sitting at a desk, you can be anywhere and yet fully involved in running your business. Interestingly I feel I bring more to the business because I now have time to sit and think of the bigger picture rather than micro managing smaller daily responsibilities. I also strongly believe in going to the spa, my favorite thing is getting a massage. That quiet quality time allows me to think. I enjoy walking a lot, with my dog or on the mountain, I love the movement and quiet time. I also exercise almost every day and do yoga and some aerobic exercises. I keep healthy, eat healthy, keep fit and travel. YPO has

allowed me to go to places I wouldn't normally go to like America and Australia, and I feel that I am bringing a lot of ideas from all these places.

She started her career in the Library and Information Services (LIS) fresh out of high school because there weren't enough resources for her to study further. This year she celebrates 36 years in the field, she is currently a member of the Directorate in an Academic Library of a leading African University. CEO of LIASA, Nikki Crowster is proof that Rome was not built in one day, it takes hard work, constant focus and years of experience to become successful.

Nikki Crowster worked her way up the ranks in the Library Information Association South Africa (LIASA) over many years. Her success is attributed to her initial engagement with Information Communication Technologies (ICT)

interests from branch level. Crowster was later elected National Executive and LIASA National PRO in 2014. In October 2018 she became the 9th LIASA President. Her (2018-2020) term is guided by the theme, Libraries: Advancing development through collaboration, partnerships and innovation.

Along the way, she obtained a Masters degree in Library and Information Science, a postgraduate qualification in Educational Technology. Alongside 3 decades of management experience that became increasingly senior over the years. Crowster admits that the corresponding experience she gained, helped her understand the nuances of the LIS ecosystem which remains heavily focused in specific sectors: Academic, Public, School and Special libraries. She has acquired several skills over her two decades in the field, skills in ICT, expertise in project management and the ability to work successfully in complex hierarchical environments. Her key strengths are strategic planning and facilitation together with a deep understanding of social media and how this applies in business.

Please elaborate on LIASA's core purpose, values and goals?

LIASA arose from the passion, sacrifices and leadership efforts of disparate parties. Some were on the opposite side of the apartheid line to become a unified, inclusive, democratic organisation. The association connects, unites and empowers all library and information practitioners in South Africa. Through dynamic leadership, advancing the transformation and development of the library and information services for all citizenry. This is achieved through engaging with stakeholders, related lobbying and advocacy. In 2014 LIASA was recognised by South African Qualifications Authority (SAQA) as the Professional Body (NQF Act 67 of 2008) for the LIS sector. This was a game-changer because while the Association remains a civil society body, this award places responsibility for ethical conduct within the sector, protection of the public, and engendering public trust in Library and Information Services.

What characteristics differentiate you from a passive supplier of books and information to a key partner in the community and social development?

Libraries are essential to communities notably through the enactment of the following sustainable agendas: SA NDP 2030, AU Agenda 2063

and the UN SDG 2030. The association creates a platform that offers programmes around information, digital literacy, reading development, book clubs, digital inclusion, food and environment security and access to information. As the Professional Body for the LIS sector, LIASA champions the sector's social responsibilities.

Industry 4.0 has changed how we do business, it has affected many sectors negatively and positively. How has the library informative service been affected by the new global era?

The main concern our stakeholders have, with regards to the fourth industrial revolution is how to further obtain a shared understanding of the concept through skills development. As with other occupations, continuous professional development must be exercised for the sector to remain relevant in this case for Industry 4.0. Furthermore, LIASA is part of the conversation on the investigations by the Council on Higher Education. It reviews the standards and quality of LIS qualifications. Libraries have been around for a long time despite the continued gloomy predictions of their demise through the industrial and technological cycles because of the ability to respond to the changes in the environment. Reinventing ourselves while continuing to provide information to all who need it regardless of economic and other statues is our primary focus.

How have you successfully integrated Industry 4.0 to the current state of libraries and librarianship?

Through redesigning spaces to cater for collaboration and innovation. We have also focused on developing staff with competencies that support the 4IR such as coding, encouraging and headlining LIS-related research on the matter.

What has been the biggest highlight of your career as President of LIASA?

Being part of the association's restructuring, to embed the present zeitgeist of mindfulness and purposeful-drive. Expanding on LIASA's values of being people-centric, nation-building and disrupting the sector. Together with members of the Executive Committee, I have embarked on the 'S'yalalela Roadshow which engages the members on this process. In addition, we are advocating the professional body status of the association and the implications to employers and other stakeholders. It is too soon to call this a highlight, but the impact of these activities will see gained efficiencies in the association.

What are some of the key issues that the 20th LIASA Annual Conference will focus on discussing?

The 20th LIASA annual conference is themed: LIASA: the Butterfly effect, together with sub-themes of Innovation, reinvention and renovation of Librarians and the LIS profession.

Paying special attention to transformation, we aim to unpack the very questions you have posed here such as what it means to be a Librarian or information professional in the present day, in light of Industry 4.0, and whether we are we needed or relevant. The value proposition of the LIS sector and how we should respond to societal demands. The metaphor of the butterfly is deeper than an indicator of change.

A butterfly retains the DNA of the larva to the butterfly stage and likewise, LIASA will undergo metamorphosis while retaining its core values. The LIS sector remains true to its mandate of service to the community notwithstanding global changes such as 4IR.

Can you please tell us about some innovative solutions you have in place, addressing librarianship challenges?

The challenges in the profession are multi-faceted; our main challenge is retaining our legitimacy and validity as change agents or disruptors within society.

There are several negative stereotypes with regards to the value we bring, such as the continuous image of the grey old lady with the bun and glasses shushing everyone. Library and Information service practitioners have many titles but the professional designation 'Professional Librarian' is a legal status, a consequence of the Professional Body award which acknowledges both the academic and practice competencies required within the LIS sector.

How does your organisation ensure inclusivity, equality and transformation are the constant focal point?

LIASA came to be because of certain ideals, these ideals are part of the Association's core being and embedded in all practices. We share the struggles of this country in this regard and for this reason, we are mindful, ensuring that these principles are embedded in everyday practice.▲

Jacquiline Manyonga

Stretching the learners

South Africa's education crisis is not the fact that there is a massive lack of resources and a crippling legacy of inequality among our thousands of schools nationwide. The real crisis is that our learners are simply not being stretched—but the good news is that these young kids have an abundance of potential.

While working on an R8 million education project in the North West province a few years ago, Taryn Casey saw one of the great problems in South African education firsthand. Fortunately, at the same time, she also witnessed one of the great hopes for the future.

Casey arrived for a planned meeting with a school principal and his group of teachers, only to find just a solitary teacher on the entire school premises doing his best to look after all of the learners.

Teacher absenteeism—coupled with a growing lack of interest from teachers (often through pure frustration at the tough challenges they face on a daily basis)—has been a much-publicised issue in the story of South African education, along with the hopelessly inadequate resources that are offered up to millions upon millions of our young learners.

Despairing, and ready to pull the plug on that particular project, Casey's spirits were lifted when she spoke to one of the school's matric pupils.

"We're so bored here, miss, because even when the teachers are here, they don't challenge

us enough. They need to be taught new strategies to keep us interested in learning. We want to do well and make our parents proud," the young man told Casey, his words unknowingly helping to fuel her passion for education.

She drove away from the school in tears, later admitting that "all I wanted to do was take him out of that school and put him in a private school where he would flourish. It's just not fair. He's capable of so much more but no-one believes in him or his classmates".

"It reminded me of the adage that children really love to learn. They soak up information and knowledge like a sponge, so the real



problem in education lies with the teachers,” says Casey.

Teaching in most countries is not revered or rewarded financially or emotionally, and when you add the myriad of frustrations and challenges teachers have to juggle, a picture builds of lone educators trying to take down the Great Wall of China with a handful of feathers.

Casey is the CEO of Edufundi (formerly known as Edupeg), an NGO created in 1998 with the intention of making a real and measurable

“Our ultimate aim for each school is self-sufficiency, not dependency—we want to get rid of ourselves”

contribution to eradicating the injustices of the past that are still present in education. She has played a major role in focusing the organisation on the root of the education problem—the fact that teachers themselves are in desperate need of intensive mentorship.

“Edufundi’s focus has shifted in recent years to include a strong drive towards the empowerment of teachers,” says Amon Ntul, the Edufundi Chairperson. “This new approach was based on the realisation that giving teachers intensive support to enable them to become confident and competent educators would make a lasting impact on the learners with whom they interact.”

A big complaint from many teachers throughout South Africa is that they are taught theory at university or college, have some guidance in their first year or two as a shadow or junior teacher, but after that, they are largely left to their own devices for the next 30 years until they retire. A great deal of funding for educational projects comes from organisations, corporations and educational departments, and much of this is aimed at helping learners or trying to provide additional resources for them, and while there is great merit in those initiatives, putting a greater focus on mentoring teachers seems to be having dramatic results.



Taryn Casey



“More and more of our teachers and school leaders are now coming to school with a more positive attitude”

“We also take great pains to work with the principals and teachers”

“We believe that partnering with educators in their classrooms has proven to make a real, measurable and concrete difference to the engagement of learners, and these teachers have worked wonders to dramatically increase the pass rates, but we also believe it’s essential that this change has a lasting impact in order to make it sustainable within each school,” says Casey.

To this end, Edufundi puts a major effort into building the capacity of school management teams, as these individuals have the power to drive the growth of mentoring within their schools on an ongoing and sustainable basis, allowing the Edufundi mentors to move onto other schools crying out for help.

“Our ultimate aim for each school is self-sufficiency, not dependency—we want to get rid of ourselves.





“Edufundi's focus has shifted in recent years to include a strong drive towards the empowerment of teachers”

“Despite the extremely challenging environments in which they work, more and more of our teachers and school leaders are now coming to school with a more positive attitude as they have been equipped with teaching tools and the skills they need to make a major difference in the lives of their learners,” says Casey

During Edufundi's recent AGM, Professor Jonathan Jansen, a delightfully outspoken educator and author, talked about the importance of teachers being present for their learners. Not one to do things by the book or stick to the tried and tested ‘old school’ ways, Prof. Jansen related how he used to make a point of visiting all of his students in their own homes at some point during the school year.

This was done partly as a mark of respect, but also to let his students know that he saw them for who they are, that he understood and accepted them.

He is strongly of the opinion that pigmentation does not, in any way, affect a child's ability to learn, and this fact has been borne out time and time again by the schools that work with the Edufundi mentors. Many of these schools are painfully poor in terms of resources but the teachers are creating incredible results with their students, with the pass rate sometimes rocketing from 20%, up past 70% in a short space of time.

Armed with the Edufundi toolkit and the regular assistance of a mentor who knows firsthand the challenges of teaching, there is a growing body of passionate and empowered teachers who are proving that South Africa's tired, poor and huddled masses have the potential to thrive. These teachers are finding their passion for their work again as their learners are becoming engaged in their classes and discipline has been restored.

The knowledge that incredible success in education is possible—even in schools where children come from poor socio-economic backgrounds bedevilled by numerous social problems—should serve as a beacon of hope for every South African.

To borrow from Barack Obama (‘Yes, we can!’), our young learners can succeed... but the solution lies with the teachers. Sadly, in South Africa, too many people enter the teaching profession as a last resort, while countless others who were born to be teachers avoid the profession because of the poor pay and huge challenges facing everyone working in the profession. Those who teach also struggle with huge workloads

and little in terms of guidance, empowerment or growth, and stagnation is a fertile breeding ground for problems and malfunctions.

The NGO started with the right intentions but, as with all growth in life and business, it is essential to roll with the changes. To shift the organisation from the path it was on required some tough decisions regarding team members, but the result of making the necessary changes was that there was a flood of energy that poured back into the organisation as it realigned itself to the changing needs of teachers and their learners in different schools around the country.

Given the vast scale of the nation's people, education departments are, perhaps understandably, prone to a cookie-cutter approach to educating our youth, but Edufundi has shown the importance of adapting the educational approach to meet the needs and circumstances of each school.

"We also take great pains to work with the principals and teachers to find out from them

what the problems are and to work with them to create long-term solutions," says Casey.

Edufundi operates in four provinces, with each offering very different challenges. In KwaZulu-Natal, for example, an ill-advised departmental policy has resulted in huge overcrowding in many schools—with classes of more than 100 learners per teacher being a far too regular occurrence.

The beacon of hope through the Edufundi experience, however, is that education truly can work in South Africa, even where resources are tight and children face major social and economic hardships.

It can work because of the power of the young mind if inspired and engaged—but the key resource is the teachers and the support given to them.

Edufundi has achieved staggering results in under-resourced schools, so surely it should be possible to achieve similar success throughout South African schools using innovative approaches such as those Edufundi has brought

from overseas, adopted from other South African institutions, and those the organisation has come up with themselves?

It's impossible to find the right answer if you don't know what the question is... but the Edufundi team and the schools they have partnered with have clearly found one answer that works for each individual school.

The question now is: How can the government distill this attitude and approach into a way of thinking that will enable passionate educators around South Africa to identify the needs in each individual school and, with passionate teachers who are given support, to be present for their learners to ensure they blossom and reach their full potential?

We have a fight on our hands, there's no doubt about it, but it certainly makes it easier to glove up when you have confidence in the ability of our children to learn. And they truly have that—each and every one of them. ▲

Simon Lewis



"It reminded me of the adage that children really love to learn"

Agri-Business and Eco-Tourism Forum, Angola-South Africa

26 & 27 September 2019 • Cape Town International Convention Centre

The conference will be welcoming high-level Government and private sector delegations from Angola. The relevant South African Government departments will also be represented at Ministerial level. Exciting business and investment opportunities in Angola will be announced at the event.



This exciting high-level conference should prove to be the perfect base from which to launch cross-border economic and social relations in the agricultural and eco-tourism sectors of both countries since it is intended to attract major role-players in this area. Intended as a noteworthy networking platform, it will not only promote and facilitate foreign private investment for agri-business and eco-tourism projects as well as future business relationships between Angola and South Africa, but it may inadvertently become a gateway event for access to other markets in the Southern African Development Community (SADC)



For delegate and sponsorship opportunities

Contact: Venesia Fowler
venesia@capemedia.co.za



LEADERSHIP IN

energy

ENDORSED BY SAOGA, SAE, SESSA, SAPVIA & SAWEA



ENERGY
FORE
CAST

FOCUS SECTION

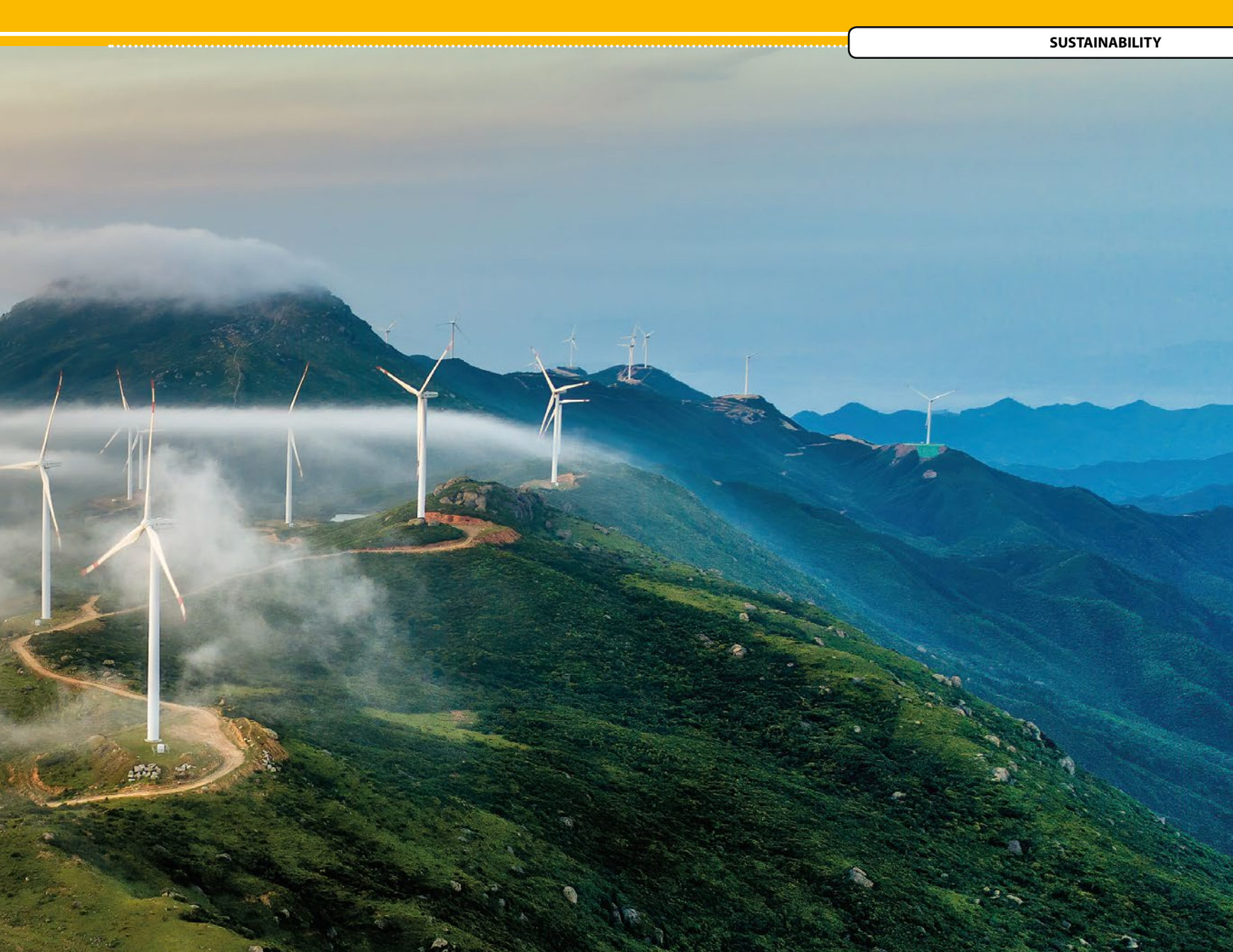
Contents

38 Renewable energy holds the key to the future

46 Oil and gas in SA

Renewable energy holds key to the future

With Eskom unable to generate enough power for the country through its major energy source—coal—the need to vigorously pursue the production of renewable energy in South Africa cannot be overemphasised



With global warming being one of the world's most pressing problems, the pursuit of clean sustainable energy becomes not only necessary, but urgent. According to the Department of Energy (DoE), South Africa's energy demand is expected to double before 2030.

Renewable energy is power obtained from renewable resources which naturally replenish themselves, such as sunlight, wind, waves, rain, biomass, and geothermal heat. The energy sector in South Africa is an important component of global energy regimes due to the country's innovation and advances in renewable

energy, and therefore the sustained pursuit of sustainable energy has the potential to change the country's power situation irreversibly.

With the current power deficit, it is crucial that Independent Power Producers (IPPs) play a significant role in addressing future electricity needs of the country through small-scale renewable projects. Besides helping meet the country's power needs, this will reduce the funding burden on Government and relieve the borrowing pressure on Eskom.

According to the Centre for Public Impact, economic growth and electricity consumption have been outpacing power system capacity-building in South Africa for well over two decades, and among the options that were

not being sufficiently deployed was renewable energy. In view of this state of affairs, the Renewable Energy Independent Power Producers Procurement Programme (REIPPPP) has been established to focus on using public-private partnerships with independent power producers to develop sustainable energy facilities.

The main government stakeholders in the push for renewable energy are the DoE, National Treasury and the Development Bank of Southern Africa (DBSA).

Solar energy

Solar energy is used to power electronic and electrical gadgets, and like other renewable

energies, is very safe and environmentally friendly, making it an ideal source of energy for Industry 4.0. There are no emissions as in coal-powered stations since the source of fuel is the sun.

According to the DoE, South Africa has higher degrees of solar radiation than most other countries and the intensity of radiation is almost twice that of Europe. Most areas in South Africa average more than 2 500 hours of sunshine per year, and average solar-radiation levels range between 4.5 and 6.5kW per square metre per day.

The Southern Africa region, and in fact the whole of Africa, has sunshine all year round. The annual 24-hour global solar radiation

average is about 220 W/m² for South Africa, compared with about 150 W/m² for parts of the USA, and about 100 W/m² for Europe. This makes South Africa's solar output one of the highest in the world.

Solar energy is the most readily accessible resource in South Africa. It lends itself to a number of potential uses and the country's solar-equipment industry is developing rapidly. Annual photovoltaic (PV) panel-assembly capacity totals 5MW, and a number of companies in South Africa manufacture solar water-heaters.

Research has been undertaken to evaluate the potential energy savings and financial benefits of residential solar water heating. The technology is very successful in South Africa and

Eskom has assisted the South African Bureau of Standards to test a variety of different domestic solar hot water systems in order to determine the best suppliers for solar installations going into the future.

South Africa's water heating load is primarily electricity and there are great benefits in freeing up electrical capacity when electric geysers are replaced with solar equivalents. Solar water heating is by far the most cost effective renewable technology in South Africa. The cost/kW could easily be as low as R22,500/kW compared to other renewable technologies which could be as much as R100 000/kW.

The hot water market constitutes approximately 30% of the South African energy



consumption in the combined domestic, commercial and industrial sectors.

Wind power

For time immemorial, wind was under-utilised as a power source until a breakthrough by scientists. Wind can now also be used to generate electricity. Wind energy, like solar energy, is a free renewable energy source and will never run out.

The amount of energy that can be extracted from wind power depends on its speed. The higher the wind speed, the more energy that can be harnessed to generate electricity on a large scale. However, this requires large tracts of land to install enough wind turbines and generators.

South Africa has fair wind potential, especially along the coastal areas of Western and Eastern Cape.

Sere Wind farm in the Western Cape is one of the largest wind farms in Southern Africa, with a production capacity of 100 MW. The project is estimated to have cost about R2.689 billion and was fully commissioned on the 31st March 2015.

Hydro power

Energy from water can come from waves, tides, waterfalls and rivers and will never be exhausted as long as water is available. South Africa does not have much in terms of hydro power generation, and imports electricity

from Cahora Bassa hydropower station in Mozambique. There is also potential to import more hydropower from countries such as Zambia which generates its power from the Zambezi River and Zaire which has unlimited potential on the mighty Congo River. Such imports would make South Africa less dependent on coal-fired power stations.

However the generation of hydroelectricity is not without environmental effects. Large areas of land may be flooded when dams are built. This will disrupt wildlife habitats and residential and farming areas. Another problem is that cold water released from deep in a dam may have little dissolved air in it. If large amounts of this water are released into rivers, fish may be killed.





But a more streamlined management approach can be used to avoid this.

Global pressures regarding the environmental impact and displacement of settlements by huge storage dams sometimes limit the exploitation of hydropower on a large scale.

Hybrid energy

Hybrid energy systems are a combination of two or more renewable energy sources such as PV (photovoltaic), wind, micro-hydro, storage batteries and fuel powered Gen-sets to provide a reliable off-grid (a source of energy not connected to a grid) supply.

Bernard Marr, a futurist and a strategic business & technology advisor to governments and companies says the digitisation of processes has led to a significant transformation regarding the way products are produced and

services rendered as a result of Industry 4.0. He says a key component of Industry 4.0 is the Internet of Things which is characterised by connected devices. Not only does this help internal operations, but through the use of the cloud environment where data is stored, equipment and operations can be optimised by leveraging the insights of others using the same equipment or to allow smaller enterprises access to technology they wouldn't be able to afford on their own.

As Industry 4.0 unfolds, computers will be connected and communicate with one another to ultimately make decisions without human involvement.

According to Takunda Gumbo an IT specialist, in the production of hybrid energy for example, computers can coordinate to save water if they realise that the maximum required energy

can be generated using mostly wind and solar energy. Water which could have gone towards hydro power generation can be saved in the reservoir and used for other purposes such as irrigation or domestic use.

“Through the Internet of Things, amazing things can be done by computers on their own. For example in a hybrid energy set up, if solar, wind and hydro power are expected to collectively generate a certain amount of energy, but it happens that solar and wind cannot meet their quotas because there is not enough sunshine nor enough wind, the network of computers can coordinate to open an additional floodgate to generate more hydro power to cover the shortfall arising as a result of poor sunshine and wind,” says Gumbo. ▲

Babington Maravanyika



Explore South Africa!

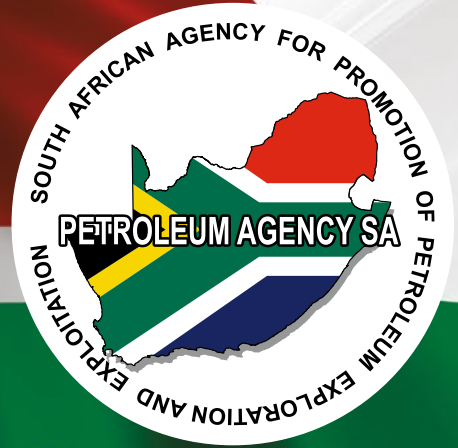
Petroleum Agency SA encourages investment in the oil and gas sector by assessing South Africa's oil and gas resources, and presenting these opportunities for exploration to oil and gas exploration and production companies.

Compliance with all applicable legislation in place to protect the environment is very important, and rights cannot be granted without an approved Environmental Management Plan.

Explorers must prove financial and technical ability to meet their commitments in safe-guarding and rehabilitation of the environment.

Preparation of Environmental Management Plans requires public consultation and a clear demonstration that valid concerns will be addressed.





Petroleum Agency SA,
based in Bellville, Cape Town,
is responsible for the promotion
and regulation of exploration
and exploitation of oil
and gas (petroleum) resources.

Contact us to find out about:

- Onshore or offshore exploration opportunities
- Permits and rights
- Availability of geotechnical data.

+27 21 938 3500

plu@petroleumagencycsa.com
www.petroleumagencycsa.com



Oil and gas in SA

With South Africa currently importing the bulk of its oil needs, the prospect of becoming self-sufficient in terms of this much sought after resource for at least four years is a most welcome development which should boost the country's economy immensely



French oil firm, Total, in February this year announced the discovery of a large “gas condensate” 175 kilometres off the south coast of South Africa at its “Brulpadda” prospects in the Outeniqua basin. The well is estimated to contain between 500 million to over a billion barrels of oil and extends to a depth of more than 3.6 kilometres.

The gas condensate—effectively a liquid form of natural gas - is a more prized fossil fuel than crude oil, and energy specialist Stephen Larkin of Africa New Energies believes that if the government plays its cards right, the find could cut the country's budget deficit by 30%.

While the prospect of becoming self-sufficient is something worth celebrating, it is not going to happen overnight. Energy experts say exploration could take up to three years, while production could be six to nine years away. There could also be political delays to contend with.

According to an article published by the Daily Maverick, South Africa is working on a policy to govern the development of oil and gas resources after calls by potential investors to shield the industry from a long-running debate over laws that apply to mining exploration.

The finalising of oil legislation has become more urgent since Total SA's announcement of the first significant deep-water oil find off the coast of South Africa in February.

Addressing parliament recently, Energy Minister Gwede Mantashe said his department had begun with the process of developing a Petroleum Resources Development Bill. He said there was need to speedily work to entrench regulatory and policy certainty.

Mining experts believe that developing a separate oil and gas policy will protect the

industry from uncertainty that has held back the mining sector. The sector has been bogged down in debates over a new government charter aimed at redistributing the country's mineral wealth.

South Africa currently imports about 60% of its oil-product needs in the form of crude, which is processed at local refineries. The rest is met by plants owned by Sasol Ltd which converts oil and gas into motor-fuel products and chemicals.

According to Mantashe, the bill will further provide regulatory certainty to the upstream petroleum industry and stimulate growth and development of this sector.

While most people are celebrating Total's find, Professor Harro van Blottnitz, who teaches in the chemical engineering department at the University of Cape Town, is actually worried about this development. He says globally, hydrocarbon resources already discovered so far are enough to completely wreck the climate.

He believes South Africa can comfortably meet all its energy needs through renewable

energy, including solar and wind power whose technologies are fast maturing and are readily available.

"I believe that it's a relatively small find of unusual hydrocarbons, in difficult deep sea conditions. I hope we would rather deploy our scarce engineering skills to building infrastructure for people on land, than difficult structures in the Southern Oceans," says Blottnitz.

Green Peace has also condemned Total's exploration plans, saying discovering yet more oil and gas is not something to celebrate when burning fossil fuels is exacerbating potentially catastrophic climate change.

"This is essentially oil that we cannot afford to burn in the face of extreme weather conditions and recurrent droughts," said a statement released by the organisation, also warning of potential oil spills in future.

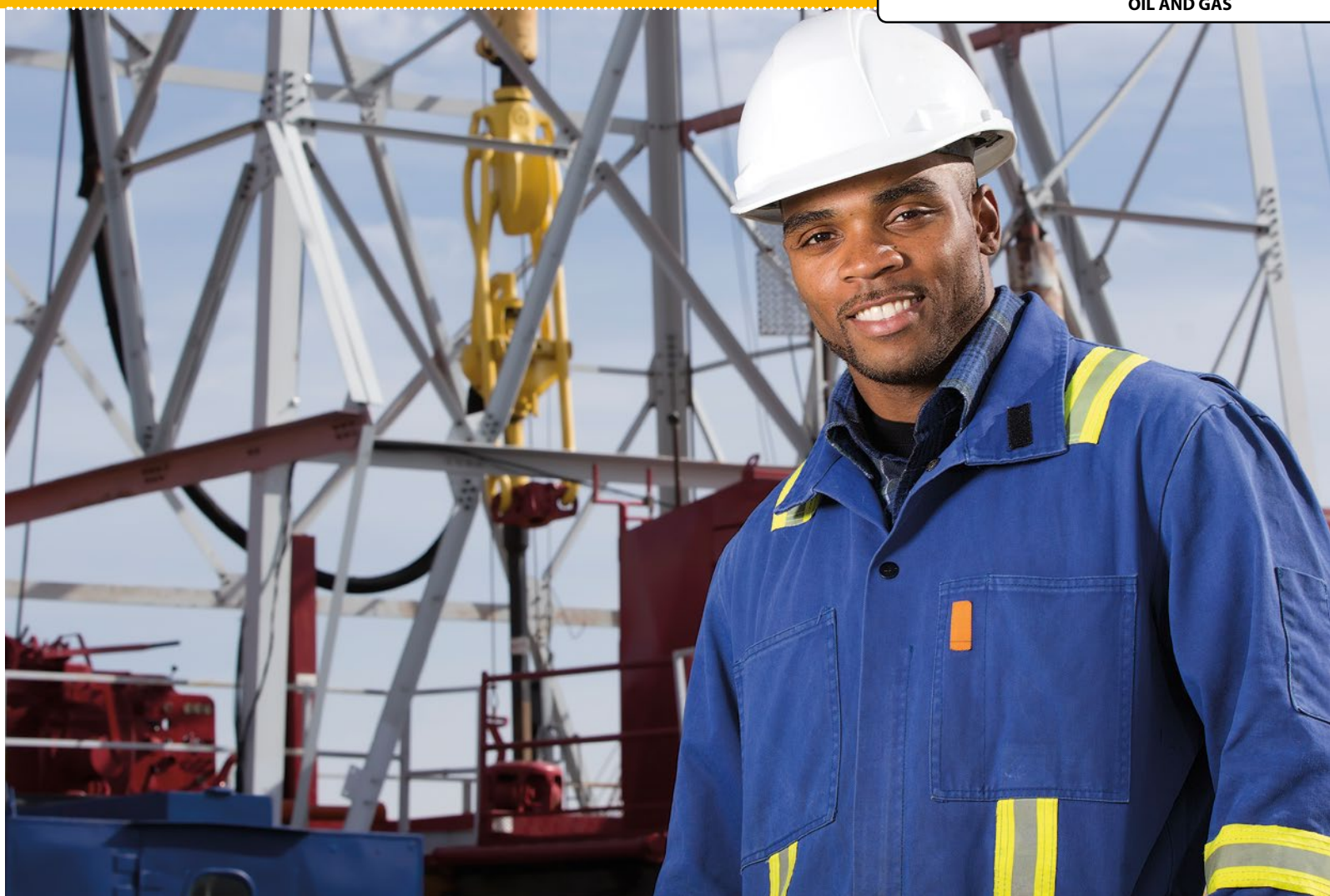
There is also a number of safety hazards associated with oil and gas extraction which makes it highly undesirable to some. These include explosions and fires.

Workers in the oil and gas industries face the risk of fire and explosion due to ignition of flammable vapours or gases. Flammable gases such as hydrogen sulphide can be released from wells, trucks, production equipment or surface equipment such as tanks and shale shakers. Ignition sources can include static electricity, electrical energy sources, open flames, lighting, cigarettes, cutting and welding tools, hot surfaces, and frictional heat.

Wells are often located in remote areas from well sites, so workers and equipment have to be transported to and from well sites. As a result, highway vehicle crashes are the leading cause of oil and gas extraction worker fatalities. According to Census of Fatal Occupational Injuries, roughly four of every 10 workers killed on the job in this industry are killed as a result of highway vehicle accidents.

Eskom's inability to provide enough electricity through its coal fuelled power stations means the government must do all it can to support the Total find. Although this new venture would





supply fossil fuels, it would definitely make Eskom tick better because at present one of Eskom's major burdens is the price of fuel to run its diesel-powered turbines.

Total's discovery is a 'catalytic find' for the country, says Niall Kramer, CEO of the South African Oil & Gas Alliance, an industry lobby group. Total now plans to acquire 3D seismic data before drilling as many as four more exploration wells at the Brulpadda well, but it cautions that the operating environment offshore is tough. Huge waves and unfriendly weather make operations very difficult.

Kevin McLachlan, senior vice president of exploration at Total says the company is pleased about the Brulpadda discovery although they will be operating in a challenging deep water environment.

The Brulpadda well covers an area of 19,000 square kilometres, with water depths ranging from 200 to 1,800 meters, and is operated by Total with a 45% working interest, alongside Qatar Petroleum (25%), CNR International (20%) and Main Street, a South African consortium with 10%.

Kramer believes the Brulpadda find could have a massive boost to all kinds of businesses in South Africa. Apart from refining oil and other downstream activities, companies will provide helicopters, marine services, catering supplies and transport to get supplies to the deep-sea platforms.

He believes artisans, particularly welders and electricians, will be needed when they get to production both onshore and on the rigs. But to start with, highly skilled and experienced engineers and other extraction experts will have to come from overseas, he said.

In addition, if the gas is converted into power, it could provide an affordable and reliable source of energy that could boost manufacturing in the country. Kramer says that businesses have been hesitant to establish large smelters because of fears over electricity reliability.

While Sedgefield is closest to the find, Mossel Bay is the most obvious beneficiary – it's the nearest hub to the find and it also hosts the PetroSA refinery.

According to Leandro Basilio, founder and COO at Deep Seed Solutions, the advent of

Industry 4.0 has resulted in subsea processing systems, intelligent wells technologies, real-time monitoring, data analysis and production management technologies.

Companies use subsea processing to access reserves located in remote areas or where environmental conditions are hostile to the traditional way of conducting business, such as the North Sea, the Arctic the North Slope of Alaska and in the deep waters of Brazil and the Gulf of Mexico.

Basilio says the advantages of placing processing equipment on the seabed are to maximise and accelerate the recovery of oil, increasing its yield, extending the life of fields and reducing the number of floating production units and surface processing plants.

Innovative technologies such as smart completion systems allow multiple production zones to be tapped by the same well, which reduces the need for investment in the exploration and production of an area consisting of several reservoirs or production sites, he says. ▲

Babington Maravanyika

Leading renewable energy

When it comes to investing in renewable and sustainable energy sources, two things are important: research—and creating a knowledgeable workforce for the future

That planet earth will eventually run out of fossil-based energy sources such as coal, natural gas and oil, is a given. It is just a matter of time.

How much time? That we can only estimate, but one thing is for sure: if leadership on this planet does not rapidly and increasingly invest in renewable energy sources, Day Zero will come—perhaps even sooner than we expect it. The good news is: over the past few decades, alternative renewable and sustainable energy sources have been discovered and older technologies have been redeveloped to run our world without having to rely on non-renewable sources.

But are we putting enough emphasis on developing human capital in these relatively new fields?

When the National Department of Energy established the Centre For Renewable and Sustainable Energy Studies (CRSES) at Stellenbosch University (SU) in 2006, the message was clear: Government has committed to develop human capital in this field.

At the helm of the CRSES is its director, Prof Sampson Mamphweli, one of SA's most resourceful and leading academics in renewable and sustainable energy studies. The centre, which falls under the Department of Science and Technology (DST) since 2007, plays a central role in terms of education and the co-ordination of research activities in this field—at SU as well as in SA in general.

"The CRSES has two focus areas, academia and contract research. We offer post-graduate programmes relevant to renewable energy including Postgraduate Diplomas, Structured Masters, Research Masters. The centre co-ordinates these programmes with the department of Mechanical and Mechatronic Engineering, the department of Electrical and Electronic Engineering as well as the School of Public Leadership. The programmes are mostly structured around week-long course modules with assignments and projects that can be executed off campus.



Prof Sampson Mamphweli, Director of the Centre of Renewable and Sustainable Energy Studies (CRSES)

"Individual modules within these programme can also be attended as stand-alone short courses, which are registered for Continuing Professional Development (CPD) points, and allow members of industry to increase their knowledge of specific subjects without the time-commitment required for enrolling in a post-graduate programme," Prof Mamphweli told *Leadership* magazine. CRSES further co-ordinates the training of PhD students conducting research on various renewable energy topics.

In terms of knowledge creation and transfer, South Africa has its work cut out. According to Prof Mamphweli, through the training of PhD and Master's students, and the training of the general public working in the industry, the centre is playing a pivotal role in bridging that gap by offering a variety of short courses,

Master's courses and PhD programmes. As for research, the Energy Research Programme (ERP) is a South African Government research programme, spearheaded by the DST with SU acting as the programme manager. Under the ERP various universities are collaborating with SU, doing work on photovoltaic (PV) research, wind energy research and high temperature solar thermal technologies.

"A number of research products, including the Heliostats patents, have sprouted from the programme. At the moment we are looking at transferring some of these technologies into the market," he says.

According to Prof Mamphweli, CRSES has also established research chairs. These include the Scatec Solar Chair and Bio-fuels Research Chair, both working closely with the CRSES centre, doing research on solar PV and



CENTRE FOR RENEWABLE & SUSTAINABLE ENERGY STUDIES

bio-energy respectively. The Eskom Chair in Power Systems Studies also resides within CRSES.

“On the contract research side of things, the CRSES has dedicated renewable energy research engineers and researchers that provide specialised and customisable services to the industry.

These services include, but are not limited to, feasibility studies, renewable energy grid integration studies, renewable energy advisory services, renewable energy modelling software training, market reviews etc.

Examples include the renewable solar energy project at the V&A Waterfront and studies done across South Africa and for other African governments.

“We conducted a feasibility study for the Namibian government. Namibia is embarking on a R40 billion large-scale renewable energy programme after we established the feasibility of integrating renewable energy into the country’s grid.

The centre’s main priority is human capital development. This is very relevant and

Prof Mamphweli, who serves on various committees at the faculty, and is also a member of the University Senate, says that collaborations are very important in this space.

“Since we can never succeed in our field without collaborations, we collaborate with research universities and other institutes nationwide, on the African continent and at international level.

“Within that network we have 16 African universities involved in renewable energy research, four of which are South African institutions. We are looking at access to food, energy and water, which is perfectly in line with our main role—to co-ordinate research and stimulate research activities,” says Prof Mamphweli.

Speaking proudly about the successes and achievements of the centre, he says there are too many to mention but highlights work done with the City of Cape Town, in collaboration with Eskom and University of Cape Town (UCT).

“In that study we are looking at renewable energy penetration with specific reference to solar energy—and we are looking at embedded generation, which the City is now allowing.

I saw an opportunity to solve real problems. Before joining SU, I implemented a number of renewable energy projects in rural areas in the Eastern Cape, where I installed hundreds of solar systems in schools and households. I could see the immediate impact, how people’s lives were improving immediately. That was very rewarding for me.”

His contribution to solving the world’s energy crisis shines in more than 90 published research articles, including book chapters, which he has co-authored.

With regard to how leadership in South Africa can improve our energy situation, the humble professor says proper planning and policy certainty over the ten, fifteen or twenty years will stimulate the renewable energy industry and attract direct foreign investment.

“Look what happened when we had policy uncertainty. When people were talking a lot more about nuclear energy, the renewable energy industry was starting to grow and then it stopped, and some investors pulled out of the programme, resulting in job losses and a stagnant economy.

“If we have a plan like the Integrated Resource Plan (SA’s energy plan for the next ten years), then we, as leaders in the field, introduce policy certainty.

“That, in turn, will stimulate the industry. Once that happens, manufacturing will take off in South Africa, allowing us to export more goods to the rest of the continent. We have the potential to become a renewable energy hub in Africa.

“What is my biggest wish? Even with the Renewable Energy Programme in action, most people employed at senior management level still come from outside South Africa. I would like to see that changing, with local people taking the lead. As a country, we still have skills shortages in this field. I would like to encourage young engineers to join the industry, and I would like to see more people in the industry upskill themselves,” Prof Mamphweli concludes. ▲

For more information, or details about the courses offered at the CRSES, go to www.crses.sun.ac.za.

“I could see the immediate impact. I could see how people’s lives were improving immediately and that was very rewarding for me.”

important in the South African context as the country has limited knowledge of most of the technologies associated with renewable and sustainable energy.

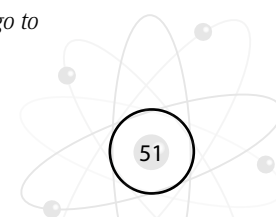
“The CRSES, in partnership with other universities, has done well in terms of human capital development of local engineers. If we look at the current national renewable energy programme, the Renewable Energy Independent Power Producers Procurement Programme (REI4P), some of the students who have graduated from this centre and other partnering universities are working in that programme,” says Prof Mamphweli.

What this means is that residents can install solar panels through the grid. The grid is used as a storage space and as no batteries are needed, the cost of the solar energy system is lower.

A leader who is no stranger to achieving great heights, the professor studied Environmental Sciences at the University of Venda.

It was during his Honours year that he gained an interest in the energy side of things and focused on bio-energy utilisation in the rural areas. When doing his PhD at the University of Fort Hare, he was an Eskom Research Fellow.

“My passion for energy was driven by my coming from a rural area where many people





BE KIND TO YOUR STAFF.

Book your next conference
at Premier Hotels & Resorts.

Imagine being shown kindness by a complete stranger. Now imagine that
from one of the country's largest hotel chains. Wouldn't that be something?

Our staff are so passionate about the value of kindness, that a conference
with us can inspire a company.

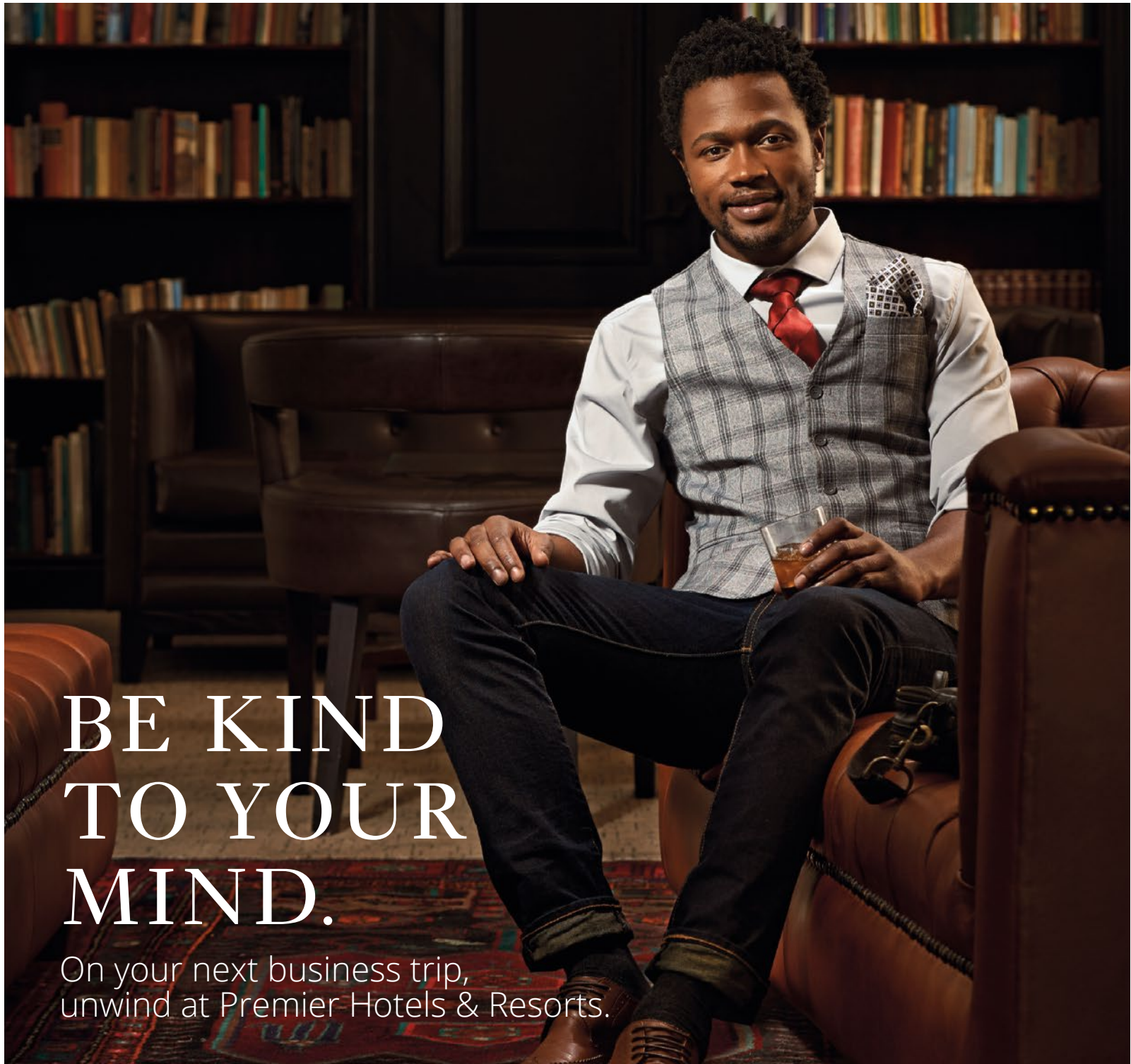
PREMIERHOTELS.CO.ZA | 086 111 5555 | INFO@PREMIERHOTELS.CO.ZA



PREMIER®
HOTELS & RESORTS

INTERNATIONAL

Eastern Cape: East London | **Free State:** Bloemfontein | **Gauteng:** Midrand, OR Tambo, Pretoria
KZN: Drakensberg, Durban, Himeville, Port Edward, Richards Bay, Scottburgh | **Mpumalanga:** White River | **Western Cape:** Cape Town, Knysna



BE KIND TO YOUR MIND.

On your next business trip,
unwind at Premier Hotels & Resorts.

Imagine being shown kindness by a complete stranger. Now imagine that
from one of the country's largest hotel chains. Wouldn't that be something?

Our staff are so passionate about the value of kindness, that a stay with us will
help you unwind from the most stressful of days.

PREMIERHOTELS.CO.ZA | 086 111 5555 | INFO@PREMIERHOTELS.CO.ZA



PREMIER®
HOTELS & RESORTS

INTERNATIONAL

Eastern Cape: East London | **Free State:** Bloemfontein | **Gauteng:** Midrand, OR Tambo, Pretoria
KZN: Drakensberg, Durban, Himeville, Port Edward, Richards Bay, Scottburgh | **Mpumalanga:** White River | **Western Cape:** Cape Town, Knysna

FINANCE MINISTER TITO MBOWENI responded in a series of tweets following Gauteng Premier David Makhura's announcement in his State of the Province Address that e-tolls had no future in the province:

"I don't know why the middle and upper classes in Gauteng want to complicate our lives. The working class do not pay e-tolls! Public transport! Hello. I am certain that the Premier of Gauteng knows that you have to be careful before you pick up a fight with a National Minister of Finance. The one who controls allocations! I would be careful if I were him."

JULIUS MALEMA, the EFF President, during the third National Students Assembly in Mangaung, linked Pravin Gordhan to the infamous comments Gandhi made about Africans in the 20th century, saying:

"We are in trouble because Pravin Gordhan has no confidence in African leadership. If you want to know Pravin's views, go and check the views of Gandhi, and you will know Pravin's views—you are on your own. You say we are disruptive in the parliament, yet they permit a man to address a sitting who twice the Public Protector has said has violated the constitution. They say, don't do anything to him. Why? Because he is a deputy white person. He defends the white status quo, he is for WMC, he is for the white minority, he is for Stellenbosch."

"You said it!"

SERENA WILLIAMS, after losing the Wimbledon final, responded to critics who suggested she stay quiet about social issues and, instead, focus, on playing tennis, saying:

"The day I stop fighting for equality and for people that look like you and me will be the day I'm in my grave."

SOPLY MAPAILA, SACP's first Deputy General-Secretary, speaking at the Rivonia Trial gala dinner, said in his defence of Pravin Gordhan, hours after Gordhan faced a standoff from EFF members who stormed the floor in a public enterprises committee meeting while he delivered his budget vote:

"Comrade Pravin Gordhan, we are in solidarity with you, we are with you. You now represent the Rivonia trialists as a frontline combatant against corruption. They have been besmirched, they have been attacked, state institutions are being abused."

JACOB ZUMA, the former South African President, said in his testimony during his State Capture inquiry that allegations of corruption against him were a "conspiracy" aimed at removing him from the political scene:

"I have been vilified, alleged to be the king of corrupt people, I have been given every other name and I have never responded to those issues. Did I auction Table Mountain? Did I auction Johannesburg?"

DONALD TRUMP, the US President, embarked on a racist Twitter tirade, targeting the four new female Democratic Members of Congress:

"So interesting to see 'progressive' Democrat congresswomen, who originally came from countries whose governments are a complete and total catastrophe, the worst, most corrupt and inept anywhere in the world (if they even have a functioning government at all), now loudly and viciously telling the people of the United States, the greatest and most powerful nation on earth, how our government is to be run. Why don't they go back and help fix the totally broken and crime-infested places from which they came from? Then come back and show us how it is done. These places need your help badly, you can't leave fast enough. I'm sure that Nancy Pelosi would be very happy to quickly work out free travel arrangements!"

Leadership

FOCUS

A man with glasses and a dark sweater is sitting in an office chair behind a wooden desk. He is smiling at the camera. On the desk in front of him is a large spiral-bound notebook with a pen resting on it. The background shows a window with white blinds and a wooden cabinet.

Terence Brown
Chairman of the South African
Deep-Sea Trawling Industry
Association (SADSTIA) and
Director of Sea Harvest

Leadership

FOCUS



58

Contents

58 SADSTIA

64 OCEANA GROUP

66 BRITEHOUSE

70 ASKAfrika

68 RHODES UNIVERSITY

72 UNIVERSITY OF JOHANNESBURG

74 MOTHEBE ENGINEERING

76 ZENZELE ENGINEERING

80 DALITSO HOLDINGS



64



66



68

70



72



76



80



LAW SHORT COURSES

REGISTRATIONS ARE OPEN



UCT Law @ work
Professional Development Project

Leading the way in continuing legal education since 1999, UCT Law@work presents a range of seminars and courses dealing with various aspects of the law in the fields of labour, commercial, private and public law, amongst others.

CHANGES TO THE NATIONAL CREDIT ACT

COURSE DATE: 27 September 2019

COST: R1,375 per delegate

WORKPLACE BULLYING

COURSE DATE: 11 October 2019

COST: R2,750 per delegate

TWIN PEAKS, THE INSURANCE ACT AND THE CONDUCT OF FINANCIAL INSTITUTIONS BILL

COURSE DATE: 25 October 2019

COST: R2,750 per delegate

PUBLIC PARTICIPATION FOR ENVIRONMENTAL GOVERNANCE

COURSE DATE: 4 - 5 November 2019

COST: R5,500 per delegate

GOVERNMENT CONTRACTS

COURSE DATE: 12 - 14 November 2019

COST: R7,995 per delegate

MEDICAL NEGLIGENCE & HEALTH SECTOR MEDIATION TRAINING

COURSE DATE: 30 September - 4 October 2019

COST: R19,500 per delegate

LEGAL ASPECTS OF CORPORATE FINANCE

COURSE DATE: 17 - 18 October 2019

COST: R6,500 per delegate

PENSION FUND CASE LAW - UPDATE

COURSE DATE: 1 November 2019

COST: R2,750 per delegate

CORPORATE GOVERNANCE

COURSE DATE: 6 - 8 November 2019

COST: R7,995 per delegate

TRUSTS: INTRO TO THE LEGAL, TECHNICAL, TAX & FINANCIAL PLANNING IMPLICATIONS

COURSE DATE: 15 November 2019

COST: R2,750 per delegate

Contact: Don Coue on 021 650 3242 | **Email:** don.coue@uct.ac.za

OR visit www.lawatwork.uct.ac.za to download the registration form



Like us on Facebook:
www.facebook.com/UCTLawAtWork



Follow us on Twitter:
www.twitter.com/UCT_Law_at_work

Fishing deep to provide economic benefits for South Africa

During the late 1960s and for most of the 1970s, catastrophic resource depletion by foreign fishing fleets threatened South Africa's hake resource, but responsible management over the past forty-two years has led to the growth and development of the deep-sea trawl fishery for hake, in turn contributing immensely to the country's GDP and creating jobs for 7 300 people.

The benefits of sustainable fisheries extend far beyond the multiple businesses that harvest the resources, advantaging a broad cross section of people – from the SMMEs that supply everything from engineering services to food for fishing crews, to the people living and working in rural coastal communities such as Saldanha, St Helena Bay, Velddrif, Mossel Bay, Gansbaai and Hermanus.

The role that the deep-sea trawling industry plays in the South African economy was explained by Chairman of the South African Deep-Sea Trawling Industry Association (SADSTIA) and Director of Sea Harvest, Terence Brown. He expanded on the nature of the thirty-three right holders active in the fishery, the importance of sustainable fishing and the initiatives and programmes that SADSTIA has in place to promote socio-economic development. Talking about his multiple roles, Terence further explained how the long-term rights allocation process, which is scheduled for 2020, has the potential to impact many lives.

Can you give me a brief background of yourself, your education, upbringing and where we are today?

I was born and raised on the Cape Flats, in Lotus River, Grassy Park and attended South Peninsula High School in Diep River. Growing up was tough, but in hindsight the "street-smart" exposure was important for my future.



I have a qualification in mechanical engineering and 20 years of experience in the local and international fishing industry.

I was appointed as the Operations Director at Sea Harvest in September 2014. Before that appointment, I worked as Fleet Manager for Sea Harvest for five years, and then moved to the Oceana Group where I held various roles in fleet and production management. In addition to these roles, I worked as General Manager at Ireland Blyth Limited, a fishing company owned by a Mauritian conglomerate, for five

years. Currently, I serve as Chairman of the Sea Harvest Foundation and as a trustee of the Sea Harvest Employee Trust. I am an Executive Director on the board of the Sea Harvest Corporation, and a Non-Executive Director of SeaVuna Fishing.

Can you please elaborate more on SADSTIA?

There are a number of recognised industrial bodies in the South African fishing industry and SADSTIA is one of them. The Association represents all thirty-three right holders in



the deep-sea trawl fishery for hake. Its role is to engage with stakeholders – including government, organised labour, scientists, non-governmental organisations (NGOs), interest groups and the broader fishing industry – for the benefit of its members and the hake trawl fishery. One of the things the Association works hardest at is supporting the infrastructure required for science-based fisheries management and creating an enabling environment for sustainable fishing. Our fishery is Marine Stewardship Council (MSC) accredited. That means it is certified “sustainable and well-managed” by the most respected certification programme for sustainable, wild-caught fish in the world. It is worth pointing out that our fishery is the only fishery in Africa to have achieved accreditation from the MSC.

Who are the members of SADSTIA?

SADSTIA's members vary considerably in size and character. Essentially there are three categories of right holders and each category operates according to a different business model. There are large, vertically integrated companies, medium-sized businesses and also smaller players that have to work together to achieve economies of scale. This diversity creates a good balance in the industry because each category supplies different types of

products. Consequently, there is no oversupply of any one product in the market.

Importantly, as a result of government policies on black economic empowerment and the linking of fishing rights with transformation criteria, SADSTIA's membership is highly transformed. A study completed in April 2019 by the independent empowerment research and ratings agency, Empowerdex, confirmed that 66.6% of our fishery is black-owned.

Why is the hake deep-sea trawl fishery so important to South Africa?

The hake deep sea trawl fishery is a R6.7 billion per year contributor to South Africa's economy, that's number one. Number two is the fishery employs 7 300 people. Investments in the fishery are estimated to be worth approximately R6.6 billion. This includes ships – our vessels are large, ocean-going ships that can operate in extremely rough seas – factories and various other types of infrastructure.

We catch hake at depths of up to 800 meters, fishing about 150 kilometres offshore. There's a huge infrastructure in place to enable the fishing vessels to catch the fish. Next time you look at your parcel of hake and chips, think about the fact that it took a ship worth approximately R250 million to catch the fish, and it cost about R350 000 to keep that ship out at sea

every day. There's about 150 000 tons of hake available in South Africa every year and our fishery lands about 122 000 tons of that. South African hake is exported to about 22 countries all over the world.

Given that SADSTIA members fish with large vessels, on an industrial scale, is your industry sustainable?

Yes. The industry is a mature industry and our members understand the importance of sustainability. There is good collaboration between industry and scientists within the Department of Environment, Forestry & Fisheries (DEFF) and we participate in a forum called the Scientific Working Group, which sits practically every quarter, or more frequently if needed. There's debate around the science and the management of the fishery and so forth, and it is very constructive. Since 2004, the fishery has been certified by the MSC which uses a very demanding, science-based system to assess fisheries. The good news is MSC certification has really improved our fishing methods. We are fishing more responsibly than ever.

Can you provide some examples of responsible fishing?

Fishing is very well regulated. You can't fish as you please, there are rules that are included

in your permit conditions. For example, if you don't catch the right fish – the right size or right species of fish – you can lose your permit. So, responsible fishing starts with compliance with fishing regulations and the rules stipulated on your fishing permit. The activities of all the vessels in the fleet are monitored by satellite at all times.

SADSTIA also has a number of other programmes in place, which help us to fish responsibly. For example, with the environmental NGO, WWF-SA, we have established fisheries improvement projects (FIPS). These enable us to improve certain aspects of our fishing operations, for example the control of “bycatch” – species other than hake that are caught in our trawl nets. We also work closely with DEFF and other NGOs; these partnerships ensure that we take cognisance of our impact across the entire ecosystem.

What are some of the most pressing issues affecting the hake deep-sea trawl fishery?

Our members hold 15-year fishing rights that allow them to participate in the deep-sea trawl fishery for hake.

The current 15-year period ends in 2020 and a fishing rights application process is currently underway. For this reason, our members are focused on the impending rights allocation process – obviously they would like to retain their rights after 2020.

Interestingly, a lot has happened in our fishery over the past 15 years. In 2005, when rights were last allocated, the industry as a whole was approximately 30% black-owned; today we are 66.6% black-owned.

What are your responsibilities as Chairman of SADSTIA, and your responsibilities as a director of Sea Harvest?

My job as Operations Director is to ensure that Sea Harvest's land-based operations in Saldanha Bay run smoothly. My job covers many aspects: managing operations, managing communities, and ensuring that the impact and

the relationship between our organisation and key stakeholders are maintained. One aspect of my job with Sea Harvest is that I am Chairman of the Sea Harvest Foundation. In this role I work with NGOs and government around socio-economic development. In the past two years, Sea Harvest has built a pre-school, and we are in the process of refurbishing twenty-two day care centers.

With respect to SADSTIA, I am primarily responsible for member and stakeholder liaison. When there is a crisis, such as the water and electricity crisis, which we were faced with recently, it is my responsibility to work with the members to manage those issues.

I also spend time with individual right holders, who may require personal attention, or assistance with information or technical details they need to operate their businesses successfully. Fortunately, I have a good vice-chair and a good secretary in place and we support each other, which makes life more manageable. ▲



Photos courtesy of Birdlife South Africa

Taking seabirds seriously

Seabirds provide a good example of SADSTIA's work to improve fishing methods in the deep-sea trawl fishery for hake

Originally, longline and gillnet fisheries were seen to pose threats to seabirds. Foraging albatrosses and petrels often become hooked or snarled in lines when they flock around fishing boats, searching for scraps or, more frequently, "stealing" bait. Gannets and other diving seabirds are frequently caught in static nets. Prior to 2014, nobody had thought that trawling posed a seabird mortality problem, but in that year, Birdlife International discovered seabird kills were indeed a problem in trawl fisheries off the Falkland Islands – and by implication in other Southern Hemisphere trawl fisheries too.

WWF-SA and Birdlife South Africa soon demonstrated that seabird interactions did occur in South African trawl fisheries. The seabird deaths surprised even the most experienced skippers and deckhands: it was difficult to see the birds flying into the trawl cables and hardly any injured or lifeless birds were retrieved by

fishers; it was only when the occurrences were captured on film that scientists and the trawling industry understood the degree to which trawl fisheries were also contributing to the global decline of seabird – and especially albatross – populations.

With the help of WWF-SA and Birdlife SA, SADSTIA moved quickly to resolve this problem. In 2006 the deployment of bird scaring devices which are called "tori lines" (tori being the word for "bird" in Japan), became mandatory in the deep-sea trawl fishery.

The lines consist of a length of rope from which six to ten brightly coloured streamers are hung.

The streamers flutter in the wind and are effective at scaring birds away from the stern of a fishing vessel where they may be accidentally killed or injured when they collide with trawl warps – the strong braided wire ropes used to tow the trawl net.

Today, tori lines are just one of a suite of measures introduced by SADSTIA to curb seabird interactions. These measures include a standard

for coating trawl cables with lubricants (sticky cables increase the potential for seabirds to become snagged in the trawl warps); a requirement to trim cable joins; a ban on releasing offal during winching; and the development of individual bird management plans.

Together, these measures have virtually eradicated the problem of seabird bycatch in the deep-sea trawl fishery for hake. A paper published in the respected scientific journal *Animal Conservation* in 2014 documented how the deployment of tori lines in the deep-sea trawl fishery reduced albatross deaths by a remarkable 99% in seven years – between 2006 and 2013.

Tori lines are easy to deploy, but to be effective they have to be individually set up for each vessel, or class of vessel, and they must be correctly deployed immediately after the trawl net has been lowered to the water. It takes commitment and dedication from skippers and fishing crews to make sure the tori lines are flown correctly from the very start of every single trawl. ▲



Bringing home the catch,



The 33 companies active in South Africa's deep-sea trawling industry deploy large, ocean-going vessels with considerable skill, harvesting Cape hake 100 nautical miles from the coast, with nets cast up to 800 metres deep and vessels sometimes riding six metre swells.

The deep-sea trawl fishery for hake is certified sustainable, supports **7 300** jobs and delivers **R6.7** billion to the economy each year. It is by far South Africa's most valuable fishery.

Black shareholding in the deep-sea trawl fishery for hake has more than doubled to **66.6%** since 2005.

whatever the weather



SADSTIA

South African Deep-Sea Trawling Industry Association

www.sadstia.co.za

Unlocking the value of the Cape hake resource



Oceana Group committed to long term value creation

A lasting impact centering on transformation, job and food security



Oceana is a fishing company on the surface, but it's so much more, deep down. Please take us through your proud 100-year history by telling us about your journey to corporate citizenship and how you have attained the status of Africa's biggest fishing company?

From a humble beginning in a tiny West Coast fishing village when Lamberts Bay Canning Company Ltd was established in 1918, Oceana has grown into South Africa's largest fishing company and is among the most empowered companies on the Johannesburg Stock Exchange.

Oceana has overcome

numerous challenges and we can count many great achievements in our hundred-year history. Presently we employ over 5 000 people in 15 production facilities and operations in South Africa, Namibia, Angola and the USA, and manage a fleet of 55 vessels.

An important milestone was achieved in 2006 when the Oceana Empowerment Trust (OET) was established to unlock and convert the value of harvesting fishing rights into shared, broad-based value for eligible black South African employees. Currently, the OET has 10% shareholding in Oceana with a market value of R900 million. To put that into perspective, the OET is the largest 100% black-owned fishing entity in South Africa in terms of ownership value. As of June 2019, 2 460 beneficiaries have received over R400 million through the Trust, allowing them to become financially empowered active participants in South Africa's formal economy. Perhaps our greatest achievement is the progress made in driving effective transformation in the industry by becoming a majority black-owned and black-controlled company in 2011.

What is your core business and core purpose, how do you interweave sustainability in all that you do?

Our core business is the catching, procuring, processing, marketing and distribution of canned fish, fishmeal, fish oil, horse mackerel, hake, lobster and squid. In addition, we provide refrigerated warehouse facilities and logistical support. We market and sell close to 300 000 tons of fish and fish products for consumers in 46 countries in Africa, North America, Asia, Europe and Australia.

Oceana is home to one of South Africa's most iconic household

names, Lucky Star. Lucky Star's range of canned pilchards satisfies the hunger of more than three million South Africans every day, with an affordable source of high-quality fish protein, and has become a market leader in its category since establishment in 1959. Lucky Star is primarily canned at our operations on the South African West Coast, providing jobs for over 2 500 people in these communities.

Any company that is afforded the right to fish must prove their ability and commitment to convert these rights into broad-based social and economic benefits in a sustainable and inclusive manner. Our business is dependent on the sustainability of marine resources in all geographies in which we operate. We rely on the strong relationships within our network of coastal communities and regulators in South Africa, Namibia and the USA. In South Africa and Namibia in particular, marine resources must be protected for future generations and we must set the example by effectively addressing numerous environmental and socio-economic challenges, not just in the commercial fishing industry but also in the wider South African and Namibian economies.

What are your thoughts on the state of the ocean economy, particularly in the South African context?

A transformed commercial fishing industry is a key to unlocking economic development in South Africa because fishing value chains offer opportunities for inclusive growth and employment at variable skills levels and can be accessible in rural coastal communities. Contrary to popular belief, large portions of the commercial fishing industry are well transformed from an ownership point of view. However, we still need to do much more to enhance transformation at participation level, particularly in areas of marine science, engineering, vessel crewing, supply chain, artisans, food safety and supply of vessels and related equipment. The development of the small-scale fishing sector and the enhancing of skills in this area is paramount to longer term success. In our context, extending the old adage, teaching a man to fish is not enough. We have to empower him, firstly by providing a fishing rod and then by providing an outlet for him to sell his fish at a respectable price.

Our biggest challenge, however, will be the creation of additional economic opportunities from a largely static supply of fresh fish from our oceans. In order to grow we need to increase investment in the farming of various fish species to increase supply and cause the knock-on positive impact on jobs and required economic impetus.

How has Oceana contributed to South Africa's ocean economy and what impact have you made on the sector?

As Africa's largest fishing company, we have seen the evidence of our capacity to effect positive change in the industry. South Africa's commercial fishing industry is one of the most transformed sectors in the economy, setting it up to become a major contributor to defeating poverty, unemployment and inequality. I am confident that we have a sustainability strategy that enables us to convert fishing rights into shared value and continue to deliver social and environmental dividends to society.

Oceana is a major employer in the coastal communities in which we operate, and we play a key role in supporting the socio-economic conditions in these communities through direct and indirect employment. We place a strong emphasis on being a leading employer and on providing employment opportunities in an environment where job security remains under threat.

To secure our continued operations and the jobs of more than 2 500 staff members employed at our canneries in Laaiplek and St Helena Bay, Oceana invested more than R35 million in two desalination plants as our response to the threat of the Western Cape water crisis, which would have shut down our operations if day zero had occurred. Furthermore, to ensure that we continue producing Lucky Star throughout the year, Oceana imports 90% of Lucky Star's pilchards supply from other fisheries around the world to process in these canneries. In so doing, we play an important role in South Africa's food security and ensure all year-round employment for our cannery staff.

We remain one of the very few commercial fishing companies that provides minimum guaranteed hours to our seasonal employees in the West Coast so that they have an income stream throughout the year, making us an important contributor to job security in this region.

In terms of strategic growth, what do you hope to achieve in the next few years?

We firmly believe that our capacity to create value is inextricably linked to the value it creates for its stakeholders, society and the broader environment. As a result, Oceana is gearing up to enter the

next 100 years and write a new chapter for our company promoting broad-based transformation, and ensuring that our shareholders, our employees, the communities in which we operate, and the government all benefit from the value we create through making the best possible use of our fishing rights. Our focus will remain on empowerment, job creation and growing the required skills for the fishing industry, while seeking to diversify into longer term sustainable fish supply in aquaculture.

What are some of the most important leadership lessons you've learnt in your career and how have they moulded your brand of leadership?

My experience has taught me that we need to set a moral compass and do what is right for the country. Sometimes these actions might not be the most beneficial from a short-term commercial perspective but investing in resources and relationships that we depend on and doing the right things now that benefit all of us in the longer term, are fundamental to ensuring sustainable value creation.

What is your leadership style and how do you encourage your employees to grow and thrive?

One of the biggest responsibilities of a CEO is to ensure that you surround yourself with an exceptionally capable team. For the workforce to perform at their best they need to feel empowered. A person is truly empowered when they have the capacity to play a proactive role in defining their own future. Often one thinks only in terms of financial empowerment, and while this is obviously important, true empowerment means that your input, insights and opinions are valued and help guide policy and strategy. I ascribe to a brand of leadership that promotes authentic interaction, participation, decisiveness and relentless striving for excellence with limited tolerance for mediocrity.

To you, what separates a good leader from a great leader?

Good leadership is when you've enabled an organisation to create value during your tenure. Great leadership is when the organisation is able to deliver sustained value creation in your absence.



If you lift others, you will rise too

The time for a feminine leadership philosophy has come

Visionary leader Zimkhita Buwa is currently Chief Operations Officer at Britehouse, a division of Dimension Data. Passionate about the information and technology industry and how it can benefit communities, she is a vocal and prominent advocate for growing diversity and female representation in the historically male-dominated ICT sector. Leadership asked Buwa to shed some light on developing self-belief, how self-upliftment equates with uplifting others and other gems from her personal treasure trove of leadership philosophy.

When did your IT journey begin?

You're taking me back a few years! My passion for IT comes from my brother. When I was in Grade 12, he was studying IT at university and he used to come home and show us all the cool things he had learned to do and code, so he inspired me to follow in his footsteps.

Prior to joining Britehouse, I was an award-winning SAP Analytics Consultant for nine years and served as chairperson of the Africa SAP User Group, Business Analytics Special Interest Group. I was also one of 200 SAP mentors chosen globally for sharing technical knowledge and guiding young professionals in the South African SAP ecosystem.

Before becoming Britehouse COO, I fulfilled multiple roles within the company, such as BI Manager, Account Manager and Regional Manager for the Western Cape Region, where I strove to make a great impact on our clients as well as on my teams.

One of the philosophies I subscribe to is that "if you lift others, you will rise too". I'm a firm believer in the power in giving back. This philosophy led to my receiving the prestigious recognition of being selected as a fellow of the Techwomen Programme in 2013, where I had an opportunity to be mentored by several inspiring women in the STEM fields of Silicon Valley. Due to my passion for promoting diversity in the ICT industry, I was also recognised as a winner of the prestigious Inspiring Fifty Award, which celebrates women as tech trailblazers in South Africa. I was also a Global Hero finalist in the 2018 Digital Female Leadership Awards recently held in Munich, Germany.

As founder of Techpearls, how do you encourage females to join the IT sector?

Techpearls is a platform to create awareness of and access to global opportunities for women in STEM—job opportunities, bursaries or scholarships, conferences, even an international competition.

The Techwomen program has blessed me with an incredible global network of women that share information and make themselves available as mentors. I wanted to ensure that South African women (young and mature) have access to life-changing global opportunities. The platform also aims to profile women in tech to eradicate the perception that only



Zimkhita Buwa, Chief Operations Officer at Britehouse

men can succeed in technology. Young women visiting the platform can read and hopefully relate to these stories.

What products and services set Britehouse apart?

Britehouse is a digital business applications and solutions provider. We're proud to be part of Dimension Data, the global systems integrator and managed services provider for Hybrid IT. As part of the NTT Limited

family, one of the world's largest ICT companies, we're able to leverage a wealth of world-class knowledge and expertise.

We believe in co-innovation, which builds strong partnerships and trust. We diversify our offerings by being client-focused ensuring we're always delivering great service. The more we know about our clients and their specific business challenges, the closer we'll get to understanding what solution will be best suited to deliver their desired outcomes.

We love the opportunities the Cloud offers our clients and work with them to exploit disruptive technologies, such as blockchain, artificial intelligence, IoT, data analytics, and more. We aim to ensure our clients have the right digital services, solutions and applications to harness the power of their data to make quick informed decisions and drive effective business management that has a real impact on the bottom line and helps their business perform at its best through their digital transformation journey.

You have received numerous awards for your work in your industry and community. What community initiatives you are part of?

I'm a board member of Silicon Cape, a non-profit organisation that aims to create a vibrant technology ecosystem in Cape Town. I have supported organisations that help young girls to gain exposure and access to the IT industry, including Girlhype, Taungana Africa, Diepsloot Preschools Projects and Code4CT. I speak regularly about women in technology at events and believe in constantly advocating for women's representation in the ICT industry within South Africa.

I value working for an organisation that shares the same values regarding making a difference in the community. As an organisation, Britehouse utilises technology to enable clients to improve their way of doing business. We believe it's our responsibility to utilise these skills and technologies for the betterment of our communities. We believe that it takes collaboration to create a brighter future. Through technology and the right partnerships, we aim to deliver sustainable value towards lasting, impactful and measurable objectives.

As a successful woman in a male-dominated world, what has been your greatest challenge and how did you overcome it?

I think my greatest challenge was not believing in myself and my capabilities. Being afraid to voice my opinion when I was in a male-dominated room.

I struggled with this until one of my mentors called me out and said, "You need to back yourself and believe that you've earned the right to be where you are." Another mentor always said, "Do it afraid – be afraid but then do it anyway." I overcame the challenge of silencing that inner voice which said "I can't" by seeking mentorship and finding people who backed me no matter what, even when I didn't back myself! Find your cheerleaders and most importantly, ask for help! Find those people who will believe in you and always back you.

What leadership philosophy do you live by?

I don't believe any organisation out there can achieve success without effective leadership. It is the key to growth and innovation. Leadership is

not about titles, hierarchy or even accolades—it is meaningful and earned. One must invest in leadership; it impacts the culture of an organisation significantly.

I subscribe to the philosophy of feminine leadership. Women tend to be nurturers by nature—a key attribute for leading high-performance teams. I speak openly about the importance of adopting the feminine leadership style comprising essential attributes such as empathy, compassion, patience and humility to ensure higher levels of collaboration, creativity and innovation. I often say I have picked up key leadership traits from being a mother. I espouse the following principles:

Investing time in your family reaps similar rewards for your child. The more time you spend with them, the more you understand what drives and energises them and you begin to understand exactly how to support them.

Patience! I will be the first to admit that this is still a development area for me! Allow the team to learn and make mistakes along the way.

Showing vulnerability. My son is eight and he's started asking some intelligent questions. There are times I'm forced to say I don't know. I am comfortable knowing it's good for him to know I don't know everything! This applies to all leaders: your team needs to understand they are the experts and you trust in them.

What does your current role as COO of Britehouse entail?

I work closely with our Britehouse CEO to design and implement business strategies and establish policies promoting company culture and vision. I also broadly oversee certain daily operations and work with the business on our people and culture portfolio, as well as all marketing initiatives. I wear the hat of being the executive looking after our Western Cape region.

I love my work. Every day there's something interesting and challenging I can learn from. I'm truly blessed to work with such talented people who share my passion for adding value to our clients, people and communities.

Following the resignation of ABSA Bank CEO Maria Ramos, there are no female CEOs listed on the JSE Top 40. How to encourage women to take on more leadership roles?

It's important to create an inclusive environment by promoting a welcoming and diverse culture, creating more opportunities for women. We must start articulating the benefits of diversity and creating this visibility within our industries.

Diversity is not a nice-to-have, it's an important differentiator for any organisation planning to remain relevant. We cannot create products or solutions for a diverse market without representative leadership. For example, women make up close to 51% of the market. We absolutely must have our male colleagues and board members recognize this.

I recently hosted a Women in IT themed event at Britehouse; I stressed that we cannot grow female representation in our organisation without our male colleagues and champions' support.

The male-dominated boards and industries must be intentional about bringing women in. Women are experienced and ready to lead; we just need the opportunities! ▲

The butterfly effect

Rhodes University Library delivers the Fourth Industrial Revolution

Education is the great engine of personal development. It is through education that the daughter of a peasant can become a doctor, that the son of a mine worker can become the head of the mine, that a child of farm workers can become the president of a great nation. It is what we make out of what we have, not what we are given, that separates one person from another.” Nelson Mandela

President Mandela’s sentiments are exemplified in the career of newly appointed Rhodes University Director of Library and Information Services, Nomawethu Danster. Born and bred in Cofimvaba, in the former Transkei, she worked at Glen Grey Hospital after matric because her domestic worker parents could not afford to send her to university.

“There were no resources, there was no funding; the only thing that motivated me was to get an education and establish myself and do something for the betterment of my community, my family and myself,” says Danster.

Then funding became available from the then Transkei government’s Department of Public Service Commission for studies in library science. “Initially I would have loved to be a social worker or a lawyer but I had to opt for what was there but I fell in love with the profession,” Danster shares.

After Bachelor and Honours studies in Library and Information Sciences at Fort Hare University and gaining work experience as a librarian at Fort Hare and the then Border Technikon, Danster received the Australian Mandela Scholarship to study towards her Master of Applied Science, Information Management at Curtin University, in Perth, Western Australia.

Appointed as the first Director of Library Services for Walter Sisulu University in 2008, she accepted the position of the Executive Director: Libraries at the University of Limpopo in 2018 before assuming her duties as Library Director at Rhodes University on 1 July 2019.

The pursuit of knowledge

Describing her philosophy as one that is open and transparent, Danster is an advocate of



Nomawethu Danster, Director of Library and Information Services

the Open Science Movement which embraces open educational resources, open software and open access.

“Like all academic and research libraries Rhodes University Library is committed to the university’s fundamental goal of pursuit of knowledge by connecting people to resources with the intention of contributing to the intellectual development of students, academics and researchers,” says Danster.

The Rhodes library service is perfectly positioned to enable students to access powerful knowledge by providing relevant and appropriate academic infrastructure, equipment and facilities that support the academic project.

“We have strategically positioned the library to support and sustain the university’s research intensive reputation. The customer services and products that we provide are designed to provide access to global information and knowledge, both off-site and on-site,” says Danster.

A new innovation of the past two or three years is the advent of learning commons. “These are hubs where under-graduates can access both discipline-specific and general resources within one spot in the library. Post-graduate commons dedicated to honours students, and research commons for Masters and PhD students and researchers are all modern spaces equipped with the necessary technologies and tools to access and use all types of information.”

Danster acknowledges that the Fourth Industrial Revolution (4IR) has already affected how libraries function, especially in terms of access to knowledge. The impact is overwhelmingly beneficial. Inclusivity has improved: “We have modernised and customised our libraries to be inclusive of the ‘digital native generation of students. International students, the communities around Grahamstown or Makanda and the high schools are also catered for. Our facilities are also very accommodating for the



physically challenged—we've got lifts all over the library from the first to the fourth floor, but in addition to that we also provide services for visually impaired students: the RUL in collaboration with the Student Affairs division have set up a dedicated workstation on Level 1 of the library with the following equipment installed: the Key-u-see keyboard; Dolphin Easy Converter Licence; Dolphin Supernova Magnifier; Mono Headset; C-Pen Reader; Explore 5 Magnifier and Texthelp.

The disability workstation within the library assists our visually impaired students with access and use of our information resources by enlarging text, making information accessible for this user group," says Danster.

Users at the centre

There has also been a quantum leap in service delivery, thanks to the "butterfly effect" of 4IR—while keeping the "human factor" firmly at the centre, bearing in mind South Africa's economic context.

"We evaluate and measure innovation insofar as it positively impacts and enhances the library's fundamental purpose. We need to identify the skills gaps and determine whether these can be met by introducing new technologies or by reskilling the existing workforce. Libraries occupy unique spaces and serve unique beneficiaries. We cannot leave the 4IR to IT or HR—libraries have a role in making sure that we transform and evolve with the revolution; we need to be very cautious in understanding and implementing the technologies so that people will not lose their jobs, continuous staff development and re-skilling is what we need."

In this regard, Rhodes Library is already on the move. "We have re-purposed our spaces and job profiles to align to the Institution's intensive research mandate. In addition to the existing position of a Scholarly Communications Librarian we are advocating for a position of Principal Librarian—Digital Humanities and Scholarship to champion research data management services in collaboration with researchers, the institution's IT professionals in the development and application of metadata to researcher-generated data sets and development of technical solutions to preserve and share data sets. This is our next move in

asserting the Library for the 4IR. However, the most important thing is the alertness and agility to measure the impact of 4IR on our human resources, on the way we do things on a daily basis, and the way we interact with users. We must determine the context of our conversation around this understanding of technology and how it should be implemented. People are anxious about the future, about job losses due to automation, about the unknown; the transformation will take care of the workforce by enabling them to understand the gradual changes into the virtual experience.

"Once we have achieved that first stage, the next stage would be for libraries to sit down and design user-centred discovery and access services, for an enhanced virtual experience. Do we really know what our users want, what levels of development our students are at? The voice of the end user is not currently there in the design of our services; we can implement the latest technology, but will our clientele really benefit?

"Technology needs to be integrated not only in the physical environment but into services, into programmes, in our day-to-day action and interaction with communities. If we don't keep up with 4IR, we will fall behind and fail to understand the complexities of the ever-changing IT environment. That would fail our students and staff at the end of the day and result in libraries becoming obsolete," says Danster.

4IR in action

As an example of user-centred 4IR in action, the Rhodes Library circulation desk combines the functions of IT and library help-desk.

"We have full-time IT navigators or IT assistants assisting all library users inside the circulation area: now users get library assistance and IT-related assistance in one place."

The Rhodes Library is also helping decolonise the internet: "The semantic web environment project entails linking institutional data elements through Wikipedia and Wikidata.

"This is important because the knowledge-base in our libraries is Eurocentric, so the involvement of South Africans or Africans in these global spaces ensures that the African knowledge base will eventually come on stage on the same par as Western or European

knowledge. We are decolonising the internet in a way. We also intend to integrate information systems with user needs through the creation of platforms including Application Programming Interfaces (APIs) for authentication and management information systems," says Danster.

Developing communities

The forthcoming annual meeting of the Library Information Association of South Africa (LIASA) will see professional librarians from academic and public libraries as well as stakeholders assemble in Durban in September.

"It's a platform for the library and information service workers to share knowledge, experiences and best practices. At the core of these discussions is how the libraries can bridge the technology gap that is holding back the development of the broader South African community."

Emotional intelligence

As a woman in a position of leadership, Danster has had her fair share of challenges.

"My personality is not the type to submit. Life experiences have strengthened my inner person. I always make certain that where I am, my voice is heard, I am not easily intimidated. What helps me as a person is a culture of continuing development; my passion for new developments and embracing change keeps pushing me to explore new advances and enhancements in the profession. Our profession has been very good in giving a challenge because it is technology driven and we are evolving minute by minute. My open and transparent personality helps people to embrace my vision.

"A leader is nothing else but influence. You just need to understand your people, understand the environment, understand the stakeholders and know where to apply that influence. You won't take decisions for them but you bring the best out in them.

"What has kept me from falling above all is emotional intelligence. The way you receive criticism, the way you take authority from your supervisor or your line management, All those things need emotional intelligence, and that is how you will be able to handle people," Danster concludes. ▲

Pick the solutions, not the drama

For Andrea Rademeyer, attitude is everything

Andrea Rademeyer is much more than a CEO and Researcher—she's amongst other things an icon for female entrepreneurs on the continent and has gained success and recognition as a leader in her field globally, over the scope of the last 24 years. She is a hijack survivor and a passionate South African. Andrea is the founder and CEO of Ask Afrika, which is one of the largest independent Market Research organisations in South Africa.

Her company's machinery is well positioned to analyse and understand the trends that we are experiencing in these crazy times that we are living in.

Her vision is to actively play a positive role in changing the business and social narrative by making us aware of the trends and in her own words make us realise the bubble we are in and which often shapes our sometimes incorrect opinions. Leadership spoke to Rademeyer for more insight into her approach.

What is your value-add to clients, particularly in such a competitive industry? What would you regard your competitive advantage to be?

We obsess about client's business problems and build analytical solutions around that. We are fully focused on ensuring value-add to our clients by solving their problems. It is rare for our industry not to push preconceived solutions but to have the mental capacity and experience to be client-focused. This capacity creates significant value-add to our invaluable clients.

Evaluating performance and looking at best practices and benchmarks are crucial, as it enables a company to make intelligent decisions. What are some of the go-to industry benchmarks your company has created?

We created a service excellence or customer experience benchmark, which tracks 200 companies across around 33 industries annually. We forecast the impact of social trends on customer expectation and service experience.

We have also created a benchmark on iconic brands in SA. There are some 8 000 products which are measured annually to yield the products which most appeal to South Africans across income boundaries. This has proven to be very useful to global and local brands,



who are trying to manage their brand positions across different SA markets including Kasi (townships). Our benchmarks include Target Group Index (TGI), the Ask Afrika Orange Index®, the Ask Afrika Icon Brands™ and Ask Afrika Kasi Star Brands.

Ask Afrika is an equal opportunity employer. To what lengths does the company go to demonstrate its commitment to embracing inclusion, especially with regard to women?

Our transparent culture centred on personal accountability and curiosity is very appealing to minority groups. Our Board of Directors is 100% female and some 62% of our employees are female. Around 10% of our staff would group themselves as LGBTI. With another nearly 10% of our staff being disabled, it paints a picture of progressive focus on mental capability as opposed to some traditional nuances.

Are there any prevalent stereotypes about women in positions of power, particularly in male-dominated industries?

Women need to be tough in most instances to be brilliant at business and equally brilliant at mothering. With our government and BBBEE requirements pushing female quotas, an unexpected challenge has been the cynical assessment of whether women are quota achievers or competent achievers. It remains tough to enjoy career life for women.

I must tell you that I have never been a feminist in the sense of wanting to be something simply because I am a woman—I don't like female clubs, I don't find it useful or intellectually even convincing. I had a lot of support from female clients and colleagues who would refer me or who would open doors for me. I think it was more of a coincidence than a sisterhood.

I do not want to formulate an absolute here, but I think that when you're an entrepreneur and you are determined, you will have stumbling blocks of some sort. In our case it might be gender.

You need to pick your basic attitude towards stumbling blocks—whether you are going to frame it and attend to it or whether you are going to choose to focus on other things. That, for me, has been a life principle. I don't like

focusing on stumbling blocks while having only 24 hours in a day to achieve my dreams.

The fact is—I think women are going to be and stay in the minority simply because we contain multitudes, simply because we can be mothers, because we can decide to take longer sabbaticals, so there are benefits to this whole gender equation.

I love the freedom that is out there now. Equally, if you decide not to be a career diva, it's also OK. Whether you are at Harvard or whether you are at any local business forum, you will be in the minority still at the moment. But don't focus on it—just push ahead.

I encourage my two daughters to accept that life is colourful. You might encounter racism, you might encounter gender issues, you might encounter ageism or religious fanatics – so you need to pick if those are your people or not. You need to find your clan of people to do business with. My biggest gratitude as an entrepreneur is that I don't have to do business with everybody—I can be choosy! Sometimes it's obvious that a client is better suited to a competitor for whatever reason—but usually it's chemistry.

Please could you tell us more about your educational and career journey?

I completed a MA in Research Psychology in 1995. Since then I have repeatedly attended the best global business schools—Harvard and Insead. As a CEO, I need to continuously develop myself—I read at least two books per month and a huge amount of electronic media.

Additionally, what would you regard as some of your personal triumphs?

Surviving and thriving for the first five years of business—where most companies go bust—was fantastic. And now we are heading for our 25th anniversary!

Creating solid employment for a few hundred individuals per year is important to my sense of contributing to society and our young democracy.

“The beauty of being a researcher, is you keep on being reminded of your own bubble.” The right data, and on a large enough scale, speaks volumes and does not lie. We live in a world where data is described as “the new gold”. And this data is used more and more to

not only understand what our preferences are but increasingly used to understand how our minds work and where our society is heading. It gives me a kick to help build society.

What are some of the most important leadership lessons you've learnt during the course of your career and how have they moulded your personal brand of leadership?

Personal life matters—don't pretend to be a one-legged marvel. Personal awareness is crucial in optimising your leadership style and impact—invest in life coaches!

You might not be aware of your status halo, but it amplifies all actions tenfold to the employee. Tread purposefully, be cognisant of your impact on employees' career trajectory and approach. In companies we talk more about behavioural codes, than we do in society or churches. Use that platform for the greater good.

What does good, effective leadership mean to you and what separates a good leader from a great one?

- Don't pick the drama—pick the solutions.
- Warren Buffet says you do business with people you like, trust and admire and I am fully in that corner and obsessed by that.
- A good leader improves the business and the lives of employees.
- A great leader also improves society and the lives of customers. ▲

Contact: Andrea Rademeyer (andrea.rademeyer@askafrika.co.za) or Sarina de Beer (sarina.debeer@askafrika.co.za) for more information or visit www.askafrika.co.za

ASK AFRIKA's core capabilities

- Customer Experience of Service and Brand Tracking
- Social Impact studies
- Product Launch forecasts
- Benchmarks on Service and Brand
- Government (national and local) Perception studies

The future of libraries in 4IR

In 1941, the writer, Jorge Luis Borges, imagined the universe as a Library of Babel containing every book that ever was or could be written

Each book has 410 pages with 40 lines of 80 characters—1 312 000 in all. The library contains every possible book of this form: 25, the number of letters in Borges' alphabet, raised to the power 1 312 000, approximately two followed by 1.8-million zeros. A catalogue of this monstrous library, in which all possible books are arranged randomly and any valid information drowns amidst tomes of nonsense, would be as complex and extensive as the library itself; retrieving a particular book would be an impossible task.

Today, many people feel the same way about the Fourth Industrial Revolution (4IR)—drowning in an infinite universe of information without any means of navigating or making sense of it. Against this background, it is encouraging that the institution best placed to wrest order from chaos is the library itself. Professor Maria Frahm-Arp, who was recently appointed as the Executive Director of the Library of the University of Johannesburg, discusses how the modern library is a dynamic agent of change on the digital frontier.

Since 2000, Frahm-Arp has followed a remarkable career path. After a Master's degree from Wits University came another Master's in Humanitarian Aid (Fordham University, USA) and a PhD in the Sociology of Religion (University of Warwick, UK), specialising in the rise of Pentecostal Charismatic Churches in South Africa, followed by a post-doctorate at Wits Institute for Social and Economic Research (WISER). She then lectured in theology at St Augustine College, SA, where in 2012 she became the Registrar and head of marketing before joining the University of Johannesburg (UJ) as a lecturer in the Religion Studies Department in 2014.

She became Vice-Dean of the Faculty of Humanities in 2017 and took over the running of the library as the Executive Director last year. Frahm-Arp is also the first woman to be voted in as President of the Association for the Study of Religion in Southern Africa which was started in 1973 and an ordained Anglican priest. Now, at UJ, she is breaking new ground again.

"We are the first university in South Africa to appoint an academic rather than a librarian as head of the library.

"Academics are on the cutting edge of what's going on in research, while the library comprises many people who excel at being librarians. If you can marry the requirements of the teaching and research fields with people's knowledge of libraries, you have a synergy for something quite exciting," says Frahm-Arp.

Information with an impact

Defining the industry in which she works as "the industry of librarianship for higher institutions of learning", Frahm-Arp finds that 4IR has brought



Professor Maria Frahm-Arp

"a variety of different, really exciting opportunities and challenges", both in terms of information science and leadership.

Frahm-Arp points out that today, we can theoretically access any information with a click, tap or swipe; the librarian's traditional function of retrieving books from stacks is being eclipsed. "Most libraries are going digital for the user's convenience and to save space.

"The challenge is dealing with the vast quantities of information out there," she says.

For this reason, librarians have a bright future in 4IR. First, the nature of research has changed.

Frahm-Arp explains: "Twenty years ago, you would write a journal article based on peer-reviewed publications in your field of study. Now, generating research is all well and good, but you can only begin to have

impactful research when you understand that the discourse is not just about, say, water pollution amongst a group of scientists looking at the biochemical make-up of polluted rivers. What are the conversations? What are the policy documents? What is the social media discussion? What has been published in the media?”

This is where the world of library science is changing. “The librarian’s job has become far more interesting and challenging; they have to learn to use all sorts of new software to draw and package all these vast amounts of data. In the age of information explosion, we need people to curate these vast quantities of information for us more urgently than ever before,” she says.

Adding to the explosion is the trend towards open-access research in which scholars share their data from experiments and interviews with each other.

“This is a noble idea, but has to be stored and managed.

“You need a librarian in the background to catalogue the data and ensure it’s tagged correctly, with the right code so other people can use it. Consequently, librarians’ work is becoming much more varied and very much around cutting-edge developments in information technology,” says Frahm-Arp

Solving problems with technology

Already, 4IR is having an impact. Every library shelve has an iPhone, for a start.

“Retail stores use an app to read product barcodes and determine how much stock is on the shelf. You don’t need a packer to take stock; the app does it for you in real time.

“I thought this would be very useful in the library: very often, students kindly re-shelve books in the wrong place; our shelve used to spend a lot of time checking for mis-shelved items. Now, they can just scan a row of barcoded books and see what is missing. When a student asks where something is, they can just look it up and send the student to the right place. Previously, they couldn’t possibly know where every book was; they would just tell the student to wait for a computer and look it up for themselves,” explains Frahm-Arp.

Further impending improvements include a library app to enable students to check books out and pay fines on their phones and tell them when and where a computer is available; complete digital maps of UJ’s five different libraries will reveal the precise location of any given book.

“It’s not about technology for technology’s sake but using technology to solve problems and equip human beings to do things that are interesting, creative, innovative—the sort of stuff we need humans to do,” Frahm-Arp comments.

Change without fear

Massive, rapid change has tremendous social implications, as Frahm-Arp has discovered in her studies of religion.

“Throughout history, revolutions are always coupled with some kind of religious expression as people try to deal with change. Artificial intelligence and deep learning, the two pillars on which 4IR rests, really took

off in 2013. We saw the Shepherd Bushiri and other cult-type churches emerging around 2015. People who feel disconnected and disempowered by change are turning to religion. They haven’t even made it to the Third Industrial Revolution; 4IR feels like a malign supernatural power. For them, the pastor’s instructions to eat grass and drink petrol in order to get a job makes sense when you are looking for a miracle and you want God to see the amazing faith that you have. In the 2019 elections, people were so disillusioned they didn’t bother to vote,” she says.

On a more prosaic level, a lot of anxiety revolves around “machines taking our jobs”. The solution: upskilling staff to preserve jobs and improve service. At the library, for example, circulation staff are becoming redundant: nobody will need to sit at the front desk and issue books; so they are being re-trained so that they can work on the libraries Research Data Management software, work in the Makerspace and other exciting new initiatives.

“My two commitments to my staff for my five years are, one, they will all learn something new and two, they will all still have a job when I leave,” Frahm-Arp affirms.

Putting people first

Frahm-Arp has taken a strategic, bottom-up approach to gearing for 4IR while addressing staff’s fear of change. She started by including those whose jobs were most vulnerable—the shelve and circulation staff.

“Each of our 154 people has to join one of 16 task teams. If you’re a shelve and research data management sounds interesting, you can join that team. The task teams are there (a) for everybody to learn something new and (b) to solve a particular problem. It’s a fabulous way of curbing people’s fear of change because they know that they’re in a team for a year and can join another one next year. Everybody is learning without being ordered about,” she explains.

The future of work

Turning to the future, Frahm-Arp says, “The 4IR workplace will be particularly agile and not hierarchical, which is very difficult in a university environment where libraries have traditionally been very hierarchical spaces. I’ve upset quite a lot of that by redrawing the management organogram and putting the campus librarians at the centre, with myself and the directors around them to support their work.”

Prioritising creative decision-making means changing the culture. “When I first joined, I had a breakaway day with my management team. Everybody got a bag with meaningful gifts. The most important one was pens with ink erasers to illustrate that you can always erase your mistakes and start again; you don’t have to get things right the first time. That’s been a very important cultural change.

“Trust and agility are essential to realising the potential of 4IR. Companies with a static hierarchy are really going to struggle. My advice to any leader in any organisation: Don’t focus on the technology—think about your headaches, find some bright young person who is a very quick study, explain your headache, and let them devise a solution,” Frahm-Arp concludes. ▲

Engineering the future

Mothebe Engineering has a mission to implement Ubuntu

Nothing in today's modern world is conceivable without engineering. From the production of life-saving medical equipment to space exploration, energy generation and the expansion of new ICT networks, the demand for highly skilled engineers is increasing worldwide. South Africa in particular needs engineers, especially in the economically heavy-lifting industries such as mining and construction.

Engineers provide the link between science and people by ensuring that technology is fit for the purposes of humans. Especially in a knowledge economy, engineers cannot be replaced. Unfortunately, the ratio of engineers to the population in South Africa is not what it should be: with only 16 000 registered professional engineers in the country, there is only one engineer for every 2600 people, whereas the developed world norm is 1:40. The good news is that South Africa is developing its own expertise to close the gap and develop the scarce skills required to address the problems of the 21st century, with an increasing number of black-owned engineering firms who are developing African engineering solutions for African problems. One such firm is Mothebe Engineering. Leadership spoke to Mothebe's husband-and-wife founding team Tebogo Kotsedi, Chairman and Tshwaro Valentine Kotsedi, CEO, for more insight into the vision and achievements of this remarkable company.

As things stand today, Mothebe Engineering is a 100% Black-, 100% youth- and 51% female-owned professional engineering and construction practice specialising in civil, building, electrical and mechanical engineering that believes in reliable, good service and a hands-on approach to business. Mothebe enjoys a collective management team experience of 21 years in engineering, construction and consulting work and is a proud member of the National Home Builders Registration Council and the Construction Industry Development Board. An experienced team of dedicated engineers enables Mothebe to offer clients an extensive range of practical and innovative engineering

solutions, services and implementation. Having executed projects for a number of private clients, parastatals and government departments, Mothebe offers solutions to all consulting, construction, mining, property development, and related services. Mothebe Engineering is an innovative professional engineering and construction practice. Tebogo expands on how the company was formed and its journey from grassroots to big projects:

"Mothebe Engineering started off in 2006 when I was in still at school in matric. Mothebe Engineering started with renovation projects focusing mostly on carpentry work. The first job was renovating my mother's newly bought house to meet her requirements at that time (as she needed an office space). It then moved on to many more small jobs, and it became more of a passion as we saw the change that we were making within the community, especially satisfying the people's needs and creating jobs. However, we needed to obtain more knowledge for us to be able to execute the passion and vision that we had. Hence, I studied civil engineering. Tshwaro also joined the company and brought her authenticity—which combined with mine creates a uniqueness that helps the company to continuously grow as it is."

The Kotsedi's pride themselves on meeting modern-day challenges by successfully delivering services safely within time and on budget. Developing and implementing new technologies which are environmentally friendly and cost-effective is a key focus. The company is dedicated to delivering quality workmanship and conducting business in an honest and fair manner that pays consideration to its partners, stakeholders, and clients. With an impressive track record of successfully completed projects in civil engineering construction and consulting, general building and maintenance services and steel structural fabrication and erection, it is clear that these promises are far from empty, but the road to achievement has not been without its challenges.

"As a young company in such a competitive industry, our biggest challenge is mostly winning over a new client that is used to an organisation that has been around for a longer



Tebogo Kotsedi

period of time. People are afraid of change and most of all afraid of new ideas so that is when we get to prove our full potential—which also makes our passion and drive worth it," says Tebogo.

What makes Mothebe's service offerings unique is the added value that they offer their clients. "We offer a turnkey service, we can design, plan and implement the project. We can save them time by finding different ways of delivering our services effectively and efficiently," says Tebogo.

Mothebe's services are especially sought after in the mining and energy sectors,



Mothebe Engineering(Pty)Ltd



Tshwaro Kotsedi

where they have successfully delivered and installed a solar system and electrical supply for worker housing, making alterations to refueling bays and constructing ramps and drainage, among others.

Mothebe is committed to maintaining competitiveness by ensuring safety and quality management standards and ensuring that principles are strictly adhered to without compromise. In addition, the company endeavours to manage human resources effectively and efficiently to achieve objectives successfully. This affords clients the peace of mind that the skills, experience, and expertise of the company's

personnel are up to the task of transforming the challenges of modern development objectives into reality. This confidence translates into ambitious plans for strategic growth in future: "We are focusing on doubling our annual turnover and growing more into structural fabrication and erection," says Tebogo.

Tshwaro Valentine Kotsedi, CEO *Balancing life and work*

As CEO, Tshwaro has many hats to wear and roles to juggle. "As the Chief Executive Officer, my role is making major decisions, delegating management responsibilities to others according to department and managing the overall operations and resources of the company. The most fulfilling aspect of all this work is when the company succeeds because of the decisions that we made."

As a husband and wife team, Tebogo and Tshwaro have to tread a fine balance to successfully balance their work and private lives. In this regard, communication holds the key.

"We all know how we can get caught up in the workplace stress, but my husband is my number one priority and I love him unconditionally. What carries us through balancing our work and personal lives is communication. Yes, communication is key. I know this might sound like a cliché but it is the truth. We have set limits and boundaries with each other, being individuals and professional at work. We understand that the workplace is a space of being professional therefore we should be easy on ourselves and let go of anger. Most importantly we make time for each other and our loved ones," Tshwaro elaborates.

Care, trust, unity, perfection

With a mission guided by the principle of Ubuntu, Mothebe Engineering is above all a caring company that strives to make the biggest possible positive impact on all its stakeholders, including staff, clients and communities. The values of inclusivity and transparency are especially prized. Making the business safer, smarter and more productive by offering transport in order to achieve set targets and goals makes a positive difference to the company's

staff. A focus on community training ensures that affected communities have the knowledge and skills to maintain and own the final product. The company succeeds in delivering on its commitments by relying on each other to do the right thing and embracing transparency, consistency, and authenticity with all stakeholders. The qualities of listening and sharing are openly on display—by collaborating with openness and respect, the company intends to demonstrate that "we are better together". This quality of respect is of course extended to clients, as the company pays special attention to detail and strives to attain optimal performance in order to secure repeat business.

These values are reflected in Tshwaro's leadership philosophy. Some of the most important leadership lessons she has learned during the course of her career, which have moulded her personal brand of leadership, are the lessons of listening, attention to detail and persistence.

"I have learned to listen more and talk less, that being original is important and that as a leader one should focus on the most critical part of the work so that work can be delivered effectively and efficiently. The most important lessons I have learned is to always keep trying on no matter how many hurdles one stumbles over," Tshwaro affirms.

The meaning of the kind of good, effective leadership that separates a good leader from a great one can be summed with the word "purpose".

"An effective leader is a person with a passion for a cause that is larger than they are. One needs to have a dream, values and a vision that will better not only themselves but the society at large.

"Acquire the hat of creativity and wear it with pride—and purpose. Be innovative, think out of the box and have strategies that will help advance the vision. Being a leader means that you should also be a learner—try to cultivate intellectual drive and knowledge and most importantly lack egocentricity. In a nutshell, a good leader has to have a purpose that is larger than themselves with a balanced personality and skills to put that purpose into action," concludes Tshwaro. ▲

Positive leadership builds authentic confidence

The 100% black female-owned Zenzele Recruitment is not your run-of-the-mill recruitment company—a hardly surprising fact, given that the company reflects the values of its founder, the dynamic and visionary businessperson, Jazz Mbanjwa



Serving as Managing Director, Mbanjwa is a passionate people's professional who believes in driving leadership through intention as much as through ability.

With 20 years' experience as a Human Capital Executive across all HR specialities, she knows how to build and grow future-fit organisations by enabling leaders and engaging employees.

Transformative leadership

Mbanjwa is constantly seeking new and integrative ways to transform leadership through people. Her commitment is evidenced by the completion of her Masters in Positive Psychology, Leadership and Strategy at the IE School of Human Sciences and Technology in Madrid, Spain, in May this year. This achievement was a stepping stone for Mbanjwa to raise her executive leadership coaching capability to a world-class standard.

For two full years, under the guidance of professors and experts from all over the world, Mbanjwa's career aspirations were profoundly enriched as she underwent a profoundly positive internal transformation. Now she is a certified executive coach specialising in Mindfulness and Positive Leadership as well as Positive Psychology, among others.

The science of human performance, Positive Psychology focuses on identifying the factors that drive greatness and developing training methods for the optimum team and personnel performance. When applied to the functional areas of management, Positive Leadership can act as a powerful catalyst enabling high-performing executives to rethink business issues from a behavioural perspective. Additionally, it



Catch the positive leadership mentor and confident Jazz on:
LinkedIn: Jazz Gcobisa Mbanjwa
Twitter: @zenzele_people
Web: www.zenzele-recruit.co.za
Blog: #JazzOptimism.com



Jazz Mbanjwa with Lee Newman
 –Dean, Professor, Edu-Entrepreneur–IE University



can enable them to develop constructive, sustainable solutions to address their biggest challenges.

Capitalising on these insights, Mbanjwa recently added an Executive Coaching arm to her business offering—which is good news for South African business, because companies that implement positive methods deliver productivity up to three times higher than conventionally led companies.

Whether she's serving on the board of the Information Technology Agency (ITA) or forming partnership agreements with IBM in her role as Managing Director, Mbanjwa believes in leading where you stand, using the platforms and resources available to you to grow leaders. She has an innate appreciation for beauty and a deep sense of zest to do more, and empower fellow South Africans in shaping their lives so that they can be the best versions of themselves. Through this process, Mbanjwa has acquired the skills and tools to assist people.

People are their profession

Founded in 2002, Zenzele Recruitment has been offering high-tech scalable people solutions with a highly personalised approach to blue-chip clients for nearly two decades.

Sourcing talent from across all sectors of employment, Zenzele has extensive experience in both the private and public sectors, including solar power energy, engineering, financial services and ICT. Likening itself to the warm African handshake that extends into a long-lasting relationship, Zenzele understands people's requirements, supporting and growing their skills and matching their talents to their career goals.

Whether you're a corporate seeking local talent suited to your company culture and core

values, or a local talent seeking a global corporate partnership to call home; the treatment remains the same—personally professional.

Like their name, which encourages professionals to “do it yourself by helping yourself”, Zenzele empowers professionals to recognise that their talents are valuable and should be valued by the people who represent their best interests.

Nurturing networks

For Mbanjwa, success includes the responsibility of giving back. As a Women-Owned Business (WBE), Zenzele belongs to WeConnect International, a global network that connects women-owned businesses to qualified buyers around the world in order to ensure women have the same opportunity as males to design and implement business solutions that create wealth and ensure the sustainable, prosperous prosperity communities.

Mbanjwa has attended WeConnect International Conferences in the UK for the past three years, networking with women on business issues and how women can trade with each other and create meaningful collaborations. She is also a fellow of the International Women's Forum South Africa and a trustee of the Ubuntu Trust, a non-profit organisation that funds economically uplifting community projects, especially in rural areas like Mbanjwa's native Eastern Cape.

Innovation

Always on the cutting edge of change, Zenzele has embraced 4IR with zeal by adopting cloud-based leadership coaching and employee communication platforms.

Zenzele is very proud that it can lead these innovations in the people development industry as a

result of a longstanding collaboration with IBM. Mbanjwa's expertise and vision, coupled with IBM's forward-thinking enterprise development programme, has resulted in a collaboration founded on a mutual belief in doing transformative work with people and businesses.

The “IBM Digital–Nation Africa” initiative provides a cloud-based learning platform designed to provide free skills development programmes for up to 25 million African youths over five years, enabling digital competence and nurturing innovation in Africa.

This partnership ensures that these young people have access to IBM-certified education and training.

Preserving institutional memory

Data is the new currency—and sometimes it gets personal. The thought of losing employees who have access to information assets is an absolute nightmare for employers whose main capital base is intangibles like goodwill or know-how.

All HR can do is get back a departing employee's keys and laptop—they can do nothing to extract the valuable knowledge lodged in their brain.

Enter Zenzele *eKnowledge Base Application*, an online system that will retain business intellectual property using AI platforms. The Zenzele eKnowledge App Launch for commercialisation into the market will take place on Monday, 5 August 2019.

The app will assist companies to retain skills accumulated over the years and make intelligent decisions based on employees' knowledge. By using IBM Watson, Zenzele can help companies document all the successes and the failures of the past to facilitate better decision-making based on processed data. ▲

Delivering a professional procurement shared service

From a young student growing up on a farm, Reshika Ramlal found herself being lured by the thrill of deal-making. Be it with her parents, siblings, friends and even the community, she always strived to negotiate the best “win-win” deal.

Many years later and this passion, her complimentary experience in Supply Chain, coupled with her entrepreneurial spirit, has enabled her to become the founder and Managing Director of Out Tasking Procurement Solutions (OTPro).

Ramlal began her journey in her mid-twenties serving at many blue-chip companies in strategic procurement and supply chain leadership roles. During this time, a pattern emerged which relieved similar barriers that make it difficult to buy and sell between organisations.

The codes of good practice (for example) serve as an opportunity for transformation and growth in our economy. As willing as corporates are to abide by these codes, multiple challenges present themselves when forging good business relationships between corporates (buyers) and suppliers (sellers).

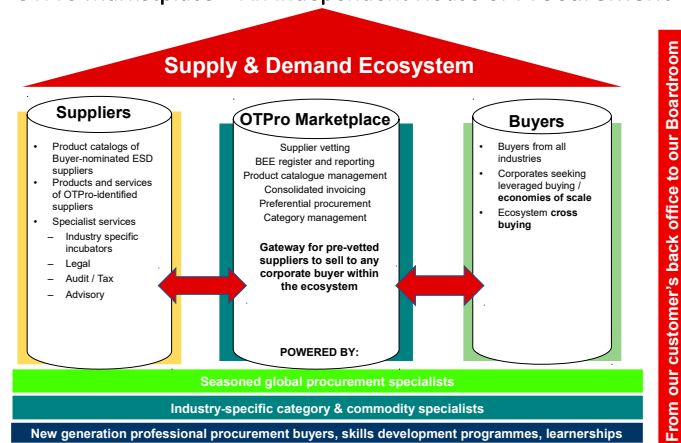
Such challenges detract corporates from providing opportunities on a regular basis to emerging suppliers and thus, make it difficult for corporates to maximise their B-BBEE scorecards. **OTPro however, believes that buying should be simple.**

OTPro is an independent house of procurement. They strive to deliver an international shared procurement service. The company’s blueprint business model caters for corporate and procurement governance in the backend whilst their corporate buyers are afforded the same user experience as that of retail online shoppers.

OTPro Marketplace provides a gateway for corporate buyers and sellers in different sectors and industries. They provide an online buying ecosystem for small and large corporates to collaborate and gain mutual benefits by leveraging on the reduced buying cost.

OTPro has successfully reengineered procurement processes based on more than 15 years of procurement expertise. They understand the pressures that small and medium suppliers face in trying to do business with larger corporates. OTPro also understands the extend of the challenges that larger corporates face in trying to afford multiple opportunities to smaller suppliers. **Their strategy is based on combining procurement expertise, technology, processes and innovation for delivering efficient new-generation buying solutions and professional services.** OTPro Marketplace is designed exclusively for business. Their up to date catalogs are from pre-qualified and vetted small / medium / large

OTPro Marketplace – An Independent House of Procurement



suppliers. Goods and services listed on OTPro Marketplace are predominantly what corporates buy—**irrespective of corporate industry.**

OTPro is an accredited B-BBEE Level 1, black women-owned, Emerging Micro Enterprise (EME) and a beneficiary of Enterprise Supplier Development (ESD). **Their customers experience total cost reduction, speed to market and seamlessly contribute to localising economies.** By enabling this, they open the door of opportunity for economic growth in South Africa, which has a direct or indirect impact on every South African citizen. **Local is lekker!**

“We are all leaders and game-changers. We demonstrate this in every decision and interaction we have as parents, coaches, in our jobs or in the way we choose to lead our lives. I once accepted a challenge to list the things that could be improved if I did something to improve it..... Never did I imagine that task would one day culminate into OTPro—a shared service brand that is changing the way we procure, changing the way we create opportunity for small business and delivering innovation in the supply chain. **We firmly believe that buying should be simple and with OTPro, it finally is!!!**” concludes Ramlal. ▲

Contact Reshika Ramlal on 011 656 0858 / 081 525 3906
reshika.ramlal@otpro.biz / www.otpro.biz



The leadership multiplier

A thriving business is built on the sincere intention to empower others

An astute entrepreneur and business woman, Dalitso Holdings Managing Director Naledi Gallant has the proven ability to integrate financial and human capital to build a thriving human resource business venture. This entrepreneurial flair is echoed in the way her career weaves together the threads of her background as the child of a go-getting Soweto mother and her meteoric rise through the corporate world.

"I was born in Soweto, as the youngest child from a family of five children. My mother, who was a single parent, was a serial entrepreneur running a multitude of businesses including selling premium brands for children's clothing, being a wholesaler in the provision of liquified petroleum gas (LPG), owning a supermarket and running a dry-cleaning plant to outsourcing construction vehicles. I learnt so many valuable lessons from her and my inclination towards entrepreneurship started from my early childhood," says Gallant.

"There has been a positive trajectory in my growth as a leader from when I served articles at KPMG after completing my B.Com degree to now as a business woman who established and has been leading a successful Human Resources Consultancy for the last 14 years. Despite being a full-time business owner and manager, I dedicated myself fully to my studies when I did my two Masters degrees in succession. Academically, I have completed: a B.Com Honours degree, an M.Phil in Entrepreneurship as well as an MBA," she says.

When she established Dalitso Consulting in 2005, Gallant had only three years of formal professional experience under her belt, making for a tempestuous, but ultimate successful, business trajectory.

"My business journey till a few years ago was typically characterized by trial and error resulting in a roller-coaster alternating between making and losing money, making the wrong staffing decisions from ill-informed partnerships to underpricing on services. Although I had the right personality traits for an HR entrepreneur, I feel that my business could have performed



Naledi Gallant, Managing Director

much better had I been equipped with a more enhanced skills set in Business Management and Administration. Additional to that, I did not have any mentorship or sponsors to get support and guidance from and this made things extremely difficult for me.”

Despite all of the above challenges, by applying hard work and having tenacity, Gallant and her team have succeeded in growing Dalitso into a viable and profitable business employing up to 70 permanent staff at its peak.

“We also opened branches in Johannesburg, Cape Town and Durban,” she adds.

Although the human resource management consultancy business is hardly undersubscribed, with many companies offering such services, Gallant spotted an opening that she was determined to exploit.

“I identified a gap in the market for the provision of highly skilled black professionals within the financial services industry since that was my background too. At the time, many businesses complained about lack of skilled personnel in the industry, and I saw this as an opportunity to bring to the fore the many experienced black professionals that I knew in my personal capacity as well as through my networks. Within three months of opening our doors, we had all of South Africa’s major banks and investment firms knocking on our doors requesting highly skilled black professionals within the financial services sector. Shortly after completing my MBA, I decided to restructure what was previously Dalitso Consulting, which provided predominantly recruitment services, into a group of divisions that provide a diversified range of HR services. Currently Dalitso Holdings provides a one-stop shop that offers the convenience of having multiple HR services requirements met in one location.”

The principles of cultural diversity and inclusivity represent the ethical core of Dalitso Holdings’ culture. Gallant explains: “As the MD, I focus on nurturing and supporting a culturally diverse work environment and workforce, which is important to meeting the unique needs of our diverse client base and the environment in which we operate. All our employees are part of the strategic planning process to make sure everyone knows the ‘why’ behind their work and to give employees greater purpose by tying individual work to the broader priorities of the company. It is also valuable for me to ask employees for their unique insights and perspectives about

the business. I’m always on the lookout for individuals who can bring significant value to the organisation. I continually invest in their development by trying to align their personal interests with that of the organisation.”

The company’s long-term profitability and sustainability are underpinned by scaling the business globally to become a virtual HR extension of its clients through the provision of a one-stop-shop human resources solution using the latest technology.

“This exponential growth will be further accelerated by empowered and participative employees that are engaged and feel valued by the organisation. They provide valuable

“One of our latest technology offerings is an online Bursary Administration and Management tool”

feedback and innovative ideas that are aligned to our business growth objectives. We believe employees are a valuable source of sustainable competitive advantage for organisations operating in a global economy and business environment characterised by change. I believe that leaders multiply themselves, building the business by positioning strong leaders in key positions,” offers Gallant.

In order to transform client relationships into viable business partnerships with clients, Dalitso has adopted a strategy of using HR to empower small businesses to succeed so that their success can feed back into the consultancy.

“We started empowering SMEs by extending HR consultancy services and business coaching that is tailor made to help grow their businesses. Too often people think that HR consultancy is only applicable to large established companies, but we are changing this narrative by showing small business ventures the benefits of implementing solid HR practices in the early stages of the business life-cycle.”

What differentiates Dalitso from the competition is a firm emphasis on putting the customer first while staying on the cutting edge of industry developments.

“We strive to be customer-centric and keep abreast with the advancements in our industry by analyzing those changes that are required to be made and seeing how the rest of the organisation is affected. We prepare teams in advance and help guide them through the transition until the new method becomes routine. This type of change management is more about developing the framework required to support the organisational changes. This is all based on workforce planning that is supported by our talent management systems.”

Gallant elaborates on the innovative human resource technology that Dalitso is currently leveraging: “One of our latest technology offerings is an online Bursary Administration and Management tool that is able to process thousands of claims and payments as well as generate reports in minutes. For many learners, effective bursary management systems such as ours bridge the gap between education and a meaningful career including access to growth opportunities within organisations. Dalitso is equipped to support bursary funds by administering and managing the distribution of funds to the relevant educational institutions whilst also supporting the bursars themselves through an integrated online solution.”

For women to take on more leadership or senior positions in the corporate world, Gallant believes that the right intention can lead to a leadership multiplier effect, as leaders create leaders.

“Leadership stems from the desire to make a difference in the lives of others and the world. It means believing in yourself and those you work with, loving what you do, and infusing others with energy and enthusiasm to accomplish a vision for a better future. It is an ethical, influential process which is multidimensional, non coercive and reciprocal. It means inspiring people to look beyond self-interest and to work together for a collective purpose. Leaders multiply themselves, building the business by positioning strong leaders in key positions. The best leaders don’t create followers; they create leaders. We need more women at the top to display such characters as well as to mentor and be sponsors for other young women. We need to support and uplift each other,” concludes Gallant. ▲

Leadership in the library

Integrating 4IR in the Wits Library space is a strategic imperative



Libraries form the core of education; education forms leaders and leaders directly affect our economy, yet they face a tremendous transformation challenge to adapt to the wave of technological change that is sweeping the world. *Leadership* spoke to Paiki Muswazi, University Librarian at the University of the Witwatersrand (Wits), about the solutions that are being implemented and the vision behind them.

What was the knowledge journey that led you to be both a librarian and a leader?

In my primary schooling, I had no exposure to libraries. At high school, I had access to a library with very old books but most were largely unrelated to what we were studying. All the same, I would take moments to go through some of these and in the process got fascinated by what I was learning. In the last

two years of my high school education, I made the discovery of a fairly well stocked township library, with books relevant to the subjects I was studying, my favourite being history. Not surprisingly, on taking up university studies, I was admitted into an Honours programme and spent three years studying only history. I enjoyed the most enriching exposure to history book collections at the university library. As an Honours student, I was required to engage with primary source materials that opened me to a completely new world of archival materials and saw me frequenting the National Archives, even if it meant only browsing through collections not related to my research topic. It all became clear that for me and for anybody else yearning to master the world around them, there could be no better source than the sheer volume, quality and reliability of knowledge in academic libraries and archival institutions and the expert staff on hand to assist. I became so attached that within a year of graduation I managed to

secure a trainee position that further exposed me to archival and library functions, leading to graduate studies and qualifications in these areas. With the advent of the Internet in the 1990s, I had the privilege of accessing some very significant continuing education opportunities that have greatly repositioned me for digital transformations. Among these are the Swedish International Development Co-operation Agency (SIDA) funded two-year continuing education project to enhance internet skills and applications in Southern African University Libraries, which ran from 2001 to 2003 and the Public Knowledge Project, which ran from 2007 to 2009 and focused on the importance of making the results of publicly-funded research freely available. Librarianship has remained a most fulfilling role. Now, with the pace of digital changes taking place all around us, I just feel I am at the centre of a most transformative experience in the practice of library and information science and that I am obliged to contribute.

What is Wits University's vision with regards to integrating the Fourth Industrial Revolution (4IR) into the library system?

Our vision is to be the information hub of choice, providing inclusive environments for accessing, producing and sharing knowledge. We are not chasing technology for the sake of it. As a research library, we want technology to enable access to, production and sharing of knowledge for the greater good in an easy, seamless and welcoming manner that significantly diminishes the uncertainties associated with 4IR. We are taking a holistic approach that encompasses infrastructure reconfiguration, embracing appropriate information and communication technologies, organisational design and entrenching open science principles and practices in our operations.

What measures has Wits University set in place to implement 4IR revolution in the library space?

Indeed, we have set ourselves on a very deliberate path, starting with a detailed review (2016-2017) of the status quo by a task team



UNIVERSITY OF THE
WITWATERSRAND,
JOHANNESBURG

with representatives from all our key stakeholders. This informed the direction we are taking. The systemic interventions we are implementing range from enabling open science and digitisation to integrating library service provision with research, teaching and learning in our spaces, organisational design, implementing appropriate enabling information and communication technologies and information skills training for lifelong learning. Our business plans speak to these strategic imperatives.

One of the most important factors that students will consider when applying to a tertiary institution is innovation and technological advancement. What characteristics differentiate your library?

We have within our Historical Papers Unit and on our campuses some iconic collections of high value to the research community. Our digitisation project is preserving and widening access to these previously inaccessible Africana materials. Through our careful application of Open Archives Initiative (OAI) compliant library and archival metadata standards, our clients benefit from an interface that searches across the catalogue, subscription databases and the Wits Digital Library and Archives.

We recognise that access to both primary and secondary source materials, on campus and off campus, preferably unfettered, underpins the success of the Wits academic project. In our Library spaces, we provide dedicated computer terminals to facilitate access to these information sources, especially for those who may lack their own devices, including assistive technologies for those with disabilities. We are also cognisant of the increasing numbers of students who have personal mobile devices and we have programmes to fit plug points across library spaces to assist with powering these. The University is completing a massive network upgrade project that is transforming our digital experience not only in libraries but also across a much wider range of other services. In addition to this infrastructure, the library prioritises the integration of information skills into the curriculum to help students navigate the complex web of resources. In recent

years, our staff have acquired advanced skills and knowledge in areas that are redefining the practice of librarianship. The Scholarly Communications, Digitisation and Library Research Support Offices are consulted across the higher education sector on matters to do with scholarly communications, copyright, plagiarism, digitisation, research data management and bibliometrics.

What are some of the librarianship challenges you face and how are you solving them?

The proliferation of information has not necessarily made it easier for clients to get information relevant to their needs. Traditionally, the responsibility for acquiring textbooks rests with students but with high costs experienced across the globe, this is increasingly beyond their reach and threatening the noble cause of equitable access to education. For the more senior students and researchers, predatory journals and conferences are posing a threat to the integrity of the research enterprise. We have approached these challenges from multiple fronts.

Our LibGuides facility is a one-stop shop grouping quality information resources by subjects/disciplines. Usage of this increases every year. In the last three years, we have improved this facility by publishing the Prescribed, Recommended and Open Textbooks LibGuides. Where there are electronic formats of textbooks, we have opted for these in place of hard copies traditionally placed under short loan collections. The Library runs an aggressive training programme, creating an awareness of questionable publishing practices, which is a matter of great concern in the academic community.

How will your library experience offer better library experiences for users?

We are committed to maintaining a hybrid library in the interim. Users will have one digital entry point to the growing digital collections and to hard copies in cases where there are no digital surrogates. We have been installing self-help machines for borrowing hard copies. Our Library spaces have scanners to help users

convert print materials to digital formats for easy use in digital research, teaching and learning environments. They will have the benefit of a robust high-speed network enabling them to send out print jobs wirelessly or on the network to any printing station of choice across campus. In addition, they have access to a number of knowledge and research commons offering computing facilities with ready access to support from library staff and discussion rooms with smart white boards for collaborative work. This is in addition to similar facilities available in other campus spaces.

What has been your greatest challenge in transforming your library process to embrace 4IR?

Libraries are an integral part of a much larger academic ecosystem. Each component of the system is seeking to transform. This requires funding. Funding bodies have a huge task in prioritizing what comes on stream first. This slows down the pace of transformation and requires lots of patience and perseverance. Undoubtedly, there is evidence that people are losing jobs as institutions deepen 4IR implementations. The requisite skills are not readily available. It takes staff commitment to reskill and this assumes the pre-requisites are there for all staff categories, which may not always be the case. The upshot is that although there is a compelling case, staff and users in the academy do not always embrace these transformations unanimously. Library leaders have a mammoth task in change management.

What can future Wits University students look forward to from the Library?

They will benefit from accessing high-tech library services in integrated virtual and physical library, teaching, learning, research and social spaces; accessing little used or rare hard copies stored in robotic regional shared storage facilities, a digital portal of heritage treasures, research products and related data sets with national linkages; information, research and writing skills programmes; and digitally knowledgeable and skilled library staff ready to support them. ▲

Anchors away

South Africa’s maritime sector cruises the high seas of opportunity

As South Africa seeks opportunities to create jobs and generate economic growth, increasing attention is being paid to the emerging ocean economy. Leadership spoke to Sizwe Nkukwana, Programme Manager for Operation Phakisa at the South African Maritime Safety Authority (SAMSA), to find out more about the exciting possibilities our maritime future holds.

After graduating from Rhodes University with a degree in economics and social science, Nkukwana started his career at Ernst & Young. After a stint at PwC he joined SAMSA as a Corporate Performance Manager in the strategy unit in August 2013. In June, he was transferred to work under the project manager for Operation Phakisa, coordinating all the different project initiatives within SAMSA.

“It’s largely an industry development role where we focus on building the ship registry, doing ship repair and maintenance for South African companies, anchoring and offshore bunkering.

“Under Operation Phakisa we have also started a Maritime Youth Development Programme (MYDP) aimed at providing employment for rural, coastal and informal settlement youth in partnership with Harambee. The programme sponsor is usually

SAMSA will continue to fulfil its mandate to grow the maritime industry regardless of whether or not there is a phase two of Operation Phakisa



Sizwe Nkukwana, Programme Manager for Operation Phakisa

the Office of the Premier in a province or the Mayor of a City,” says Nkukwana.

“When we started the Maritime Youth Development Programme we asked our partners to imagine taking a child from Crossroads or Diepsloot, getting them trained and certified, and getting them work-ready (in partnership with Harambee) then going to the cruise liners

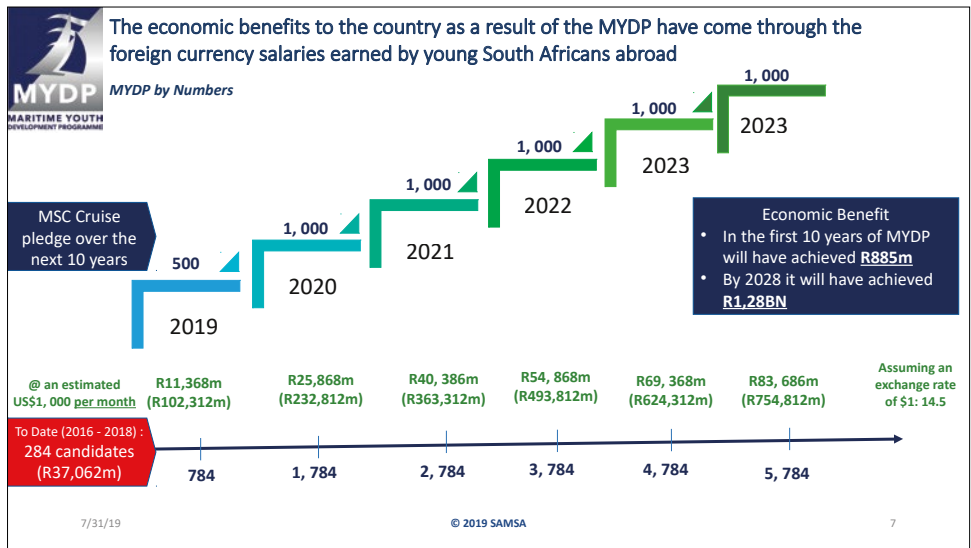
and striking a deal to place all these youngsters,” says Nkukwana.

“Imagine what it would do for that individual. They would be able to travel and see the world instead of being confined to the area where they grew up, making friends in different places with people from different cultures and speaking different languages.

“Here our youth are fighting for R3 000, R4 000, R6 000 a month, whereas in the cruise industry you can secure an entry-level job at US\$1 000 dollars a month, about R15 000. With the cost of about R60 000 to get them ready, it would take them four months to repay the country. Every R1 earned supports ten people in certain income levels. Imagine how the remittances they send back would change their families’ lives.

“That would then spill over into the community—they would become role models as people who have made the most of the opportunities they’ve been given and changed their lives. So you can transform communities through a programme like ours because of the exposure that you give to one person.”

Since inception the MYDP has enjoyed a better than 90% retention rate. People are



getting into second contracts and some are getting into their third.

“This is testament to the great job being done by our partner, Harambee, in preparing our candidates for life at sea, and we are hoping to grow it further,” says Nkukwana.

“On the demand side, which is cruise liner placements, we’ve got an uptake agreement for a thousand per year going forward with MSC alone. MSC is the third or fourth largest cruise liner in the world.

“Carnival Corporation is also coming to South Africa, starting in November when the cruise season begins, so we are hoping to grow the number of people that can be placed beyond the thousand that we have already banked to maybe five thousand a year.”

The original term of Operation Phakisa is drawing to a close, but SAMSA will continue to fulfil its mandate to grow the maritime industry regardless of whether or not there is a phase two.

One of the major projects of Operation Phakisa is the fishing vessel recap, a bid to grow the boat manufacturing space through a systematic replacement of the current ageing South African fishing fleet.

“The fishing vessel recap is a project to replace some 1400 very old vessels in the market. South Africa doesn’t have the capacity to replace those all at once, so it will be a ten- to fifteen-year project.”

Cost Item
Recruitment & Sourcing
STCW Training & Accreditation
Medicals
Seaman’s Book
Passport
VISA
Harambee Bridge
Logistics & Accommodation
Project/Programme Management

South Africa has barely scratched the surface of the potential of the ocean economy.

“From a government perspective, there’s an initiative by the Department of Trade and Industry (the dti) called the One Stop Shop, to encourage investors to come to South Africa



MARITIME YOUTH DEVELOPMENT PROGRAMME

and overcome all the red tape. We need to develop more of these in order to ease the regulatory burden on potential investors and businesses.” Government just needs to do a lot more around easing the regulatory environment, and give regulatory certainty in some areas to attract potential entrants into the market. They also need to start developing more programmes of action.

Private sector companies need to organise their capabilities so that we in the public sector know to go out and market with our counterparts around the world. Shipping lines want to know what South Africa has to offer from an infrastructure point of view so they can bring their vessels here for repair, and they also want assurances of our capability. We have to deliver as competitively as in other places.

“We in the MYDP would like to see more ships coming to South Africa because then they would

become aware of the opportunities that South Africa has to offer. South Africans have a reputation of being hard workers, so cruise liners would be very keen to have us working for them. Currently the cruise industry employs about 500 000 people, and all the cruise liners have decided that they want to double their fleet over the next ten years, which means that potentially 500 000 jobs could be available.

“That’s why MSC was quite confident to sign an undertaking to absorb 1 000 youngsters from South Africa over the next ten years.”

The Maritime Youth Development Programme also ties in with tourism and the promotion of women in the maritime sector.

Nkukwana’s passion for the industry is derived from its power to transform.

“The maritime sector is relatively new, but very important to South Africa. It has always been the preserve of well-established international companies, so there are lots of opportunities to create enterprises and grow the South African economy.”

For Nkukwana, the MYDP has the potential to be a job incubator for professions that are not necessarily tied to working on ships. “A young journalist could literally be sitting there every day producing a daily newsletter about what is going on in the cruise liners of the world, and after two or three years they’ve got solid work experience in journalism. The same goes for comedians, auctioneers, salespeople—the cruise liner sector can offer opportunities to a multitude of people.”

Another initiative SAMSA is working on in the cruise space is to create conferences and expos for the cruise industry around the world in order for all the cruise people to integrate and build their networks.

“We will have our first Seatrade Forum here in South Africa in February 2022, either in Cape Town or Durban. It will enable us to bring the cruise sector into focus, not only from a tourism and development point of view but also from a service point of view. As South Africa grows as a cruise destination, more cruise liners are going to come here and more work will then emanate for the sector, which is very important from an MYDP perspective.” ▲

Sustaining our blue economy

Our oceans hold immense economic potential but certain factors hamper the economic and sustainability progress. Pervasive illegal, unreported and unregulated fishing and piracy are perhaps some of the biggest stumbling blocks to the continued growth of the industry.

As opposed to creating jobs within communities, these issues are strangling the industry, resulting in job losses. Drastic changes are required to lift the ocean and blue economy to its rightful place. *Leadership* magazine sat down with the CEO of Twiga Services & Logistics, Damian de Lange, to find out more about the blue economy and what needs to be done within the industry.

De Lange says that, despite not being able to make exact statements about the losses the industry suffers, a critical factor in the blue economy is sustainability, which requires careful management of the way in which countries utilise and exploit the resources and opportunities of their seas and waters.

South Africa does not have extensive inland waters but as de Lange explains, “the country does have a vast coastline of almost 4 000km”. This includes sovereign territory and an exclusive economic zone along with distant islands and a small portion of the Antarctic.

Managing this area and utilising the resources is a significant challenge as it requires much in terms of information, monitoring and policing. According to de Lange, the biggest threats are “illegal fishing, the dumping of toxic waste, the movement of illicit goods, smuggling and unregulated economic activity”.

A clear focus on solutions to these issues is required. Both the private and public sectors have a key role to play if the country is to ever realise the full economic benefit that the blue economy has to offer.

“For South Africa to ensure that its blue economy is utilised in a sustainable manner and for the benefit of its people, it will have to use a cross-departmental approach, as envisaged under Operation Phakisa, and develop capabilities that ensure monitoring, information gathering, regulating, policing and, where necessary, intervention.

“This will require significant water and air assets to work close-to-shore and in the deep blue waters. It will require the gathering of information, processing and analysing this information and acting. The platforms to ensure these processes will include air and underwater drones, aircraft, ships and boats as well as trained human resources and equipment, or sensors to gather information, monitor activities and provide constant feedback,” explains de Lange.

It is crucial that everything is done in a sustainable manner in today’s day and age—a manner that benefits the environment, the Earth and the people who live on it. The vast majority (71%) of the Earth is water and “contains resources that can support economic activity and development”, which makes that much more important to protect.

But de Lange warns: “If this resource is abused or used in an unsustainable manner, the loss to humankind is beyond our comprehension. Already, human activity is driving climate change, which has an ongoing and increasing negative effect on the Earth’s seas.”



To address the security issues, de Lange along with his organisation, Twiga Services & Logistics, have the experience, expertise and tools.

“Our Rugged Boat systems provide a platform for a part of these tasks. Our Rugged Boat systems are made from high-density polyethylene (HDPE), which, in essence, is waste plastic,” he says.

The virtually indestructible Rugged Boats were designed for the military, policing, homeland security and counter-smuggling operations close-to-shore and on rivers and lakes. Deployment is no issue either—the Rugged Boat can be launched from a mother ship at sea as they are made to withstand the harshest of conditions.

“All our Rugged Boats are fitted with the architecture to accommodate a range of sensors and devices that military, police, security and counter-smuggling forces use,” says de Lange.

The Rugged Boat systems range from 6.5m to 12.5m and can be fitted with outboard motors, an inboard engine with a stern drive or inboard with jet drive. Ultimately, however, de Lange prefers to spend time with the end user in order to get a better understanding of what operations they envisage and environments they plan to operate in.

This is to ensure that the Rugged Boat supplied meets the immediate operational requirements and can be upgraded for future activities, when budgets allow.

Ensuring that the Rugged Boats have a good carbon footprint is very important to de Lange as he understands the importance of the environment. He says that the HDPE carbon footprint, compared with a similar boat made from aluminium, is about five times lower. Last year, the Uganda People’s Defence Force (UPDF) took four 850 Military Patrol Boats, built by Twiga Services & Logistics, under a contract by Impala Services and Logistics of Uganda, into its service. De Lange explains that “the President of Uganda, President Museveni, commissioned these boats and during the commissioning, he confirmed the type of operations these boats would need to perform”.

This ranged from protecting the country’s people and territorial integrity to monitoring and preventing illegal fishing in the many water bodies that form part of Uganda.

The Uganda Peoples Defence Force named the boats Ngassa, which is a fish found in Lake Victoria that is under threat from illegal fishing. ▲



Copper Development Association Africa

Copper Alliance



High strength, corrosion resistance and anti bio-fouling has made copper alloys a desirable material for aquaculture netting

Providing a cleaner and healthier environment for farmed fish to grow and thrive

Much has been written about the depletion of natural fish stocks in rivers, estuaries and the oceans because of overfishing. Aquaculture, an industry that has emerged only in recent decades, has become one of the fastest growing sectors of the world food economy. Aquaculture already supplies more than half of the world's demand for fish; a percentage that is predicted to increase dramatically over the next few decades.

Recently, copper alloys have become important netting materials in aquaculture. What sets copper alloys apart from the other materials used in fish farming is that they have strong structural properties. Attacks on nets by predators are not uncommon and to prevent damage to holding

nets made from traditional materials, additional predator nets often have to be installed. Globally in fish farms where fish have been secured in copper cages, it has been found that there is no need for an additional predator net.

Copper also demonstrates corrosion-resistant properties in marine and fresh water environments, which makes it the material of choice for Fish cages.

Additionally, copper alloys actually prevent biofouling in both marine and fresh water environments; this is highly beneficial from a cost saving perspective, as the removal of the cages for cleaning purposes is unnecessary.

South Africa's developing aquaculture industry

The deep issue on the table

According to the export data from the Department of Agriculture, Forestry and Fisheries the Aquaculture market in South Africa is dominated by the Western Cape with over 80% of production taking place there. The Eastern Cape is a long way back in second place at 12.75%. For freshwater aquaculture Limpopo, Mpumalanga Lowveld, and Northern KwaZulu-Natal lead the list but is conducted on a very small scale. This is because South Africa has a very limited suitable water supply which doesn't allow for mass production.

Marine aquaculture in South Africa is largely focused on mussels, oysters, abalone seaweeds and prawns and is a fast-developing sector. Mussel farming is considered the best established while abalone culture, centered in the Hermanus area on the Cape South Coast, isn't far behind.

Chairman of the Aquaculture Association of Southern Africa and Professor in the Department of Ichthyology and Fisheries Science at the Rhodes University, Peter Britz sat down with Leadership magazine to discuss the industry in more detail. Professor Britz has over 30-years experience in aquaculture development and has made significant contributions to the local abalone farming industry. The Britz led research group is also credited with the role they played in the development of new technology for the local abalone fishing industry.

"Most of my research has been focused on abalone farming, and I helped develop some interesting technology after which I continued to work in the abalone industry developing various aspects of farming technology."

A few years ago there were grave concerns that poaching had almost wiped out abalone along South Africa's coast but the research



project led by Britz helped show a viable way to build commercial farms and save wild populations.

In 2017 it was reported that Port Elizabeth had more than 170 heavily poached and depleted plots along the reefs but was seeded with 30 tons of abalone.

These amounts of abalone are nothing compared to some other countries supply. The simple reason for that is that South Africa is not a very suitable destination for marine aquaculture. "Aquaculture has very limited opportunities in South Africa because of the environment. We don't have the conditions to farm on a large scale, in Norway they do over 1 million pounds of salmon and that is because they have sheltered waters."

The only waters in South Africa that are considered sheltered in South Africa is that of Saldanha Bay where they do mussels and oysters on a more commercial scale. Britz adds that "Saldanha is more limited by the market

rather than the environment, while they are also busy farming trout and salmon on a more experimental basis. It will stay limited to a few hundred tons though."

In terms of the quantity that aquaculture can produce in South Africa, it will never measure up to what large scale fishing produces but according to Britz, as far as economics go, the two measure up quite well.

"In the context of the fishing sector, it is already having a fair impact. It doesn't produce to the tons of the fishing sector but it is right up there in terms of economic value – aquaculture must be employing upwards of 3000 (I can't recall the exact figure) people. For every ton of abalone it is one job," says Britz.

The industry may be small but it has had an incredible impact in providing employment, especially in smaller communities like Saldanha Bay where in fact it has saved jobs after factory closures.

Like any industry further improvement is needed and perhaps better regulatory measures, but Britz is quick to point out that the aquaculture industry receives a lot of support and backing from the government. "Government has provided a lot of jobs, environmental monitoring, health services, and there are industrial subsidies provided. The red tape is a bit burdensome but I think the rules that are there are good, they just find that the process of applying for a permit is quite onerous."

The next step forward will be to become part of the EU which would allow us to export our goods. The access to market is currently very limited with only South Africa to service. Britz explains, "for a couple of years now there has been a water quality monitoring programme to try and meet the EU standard but as yet we have not managed to pass the process." ▲

Ralph Staniforth

Dtorque, the perfect partner in the aquaculture industry

As the distance of most aquaculture farms is quite close to shore, the operators of these farms require smaller vessels and barges to manage these farms compared to other inshore and offshore fishing operations. In order to reduce the cost and complexity of these vessels further, the operators typically fit outboard engines to power these vessels, with petrol powered outboard engines being the most commonly accepted.

The concept of a diesel-powered outboard is not strange to many commercial operators and Yanmar is well known for their D27 and D36 diesel outboard engines. With the introduction of stricter emission regulations, the decline in the oil and gas markets around 2008 and the high costs of research and development of diesel engines, the decision was made to stop the manufacture of these diesel-powered outboard motors. Ever since, there has been a gap in the market for diesel outboards. In 2017, Yanmar announced the global distribution of the Dtorque 111, a 50Hp diesel outboard, after an agreement was reached with the developers of the engine, Neander Shark.

Operators of small-scale fishing and aquaculture operations now have the option of fitting this, game-changing outboard engine to their vessels. The compact design of the Dtorque with its innovative design features has a life expectancy of at least double that of a comparable 60 or 70Hp petrol-powered four-stroke outboard. The engine is rated at a respectable 50Hp @ 4000rpm, but it is the 111Nm at a modest 2500rpm which distinguishes it from its petrol-powered counterparts. This torque figure is comparable to modern 60 and 70Hp, four-stroke petrol-powered outboard engines currently sold on the market. The low-down power will quickly put the vessel on the plane and will have plenty of torque for heavy displacement duty.

The twin cylinder common rail diesel engine uses a unique system of twin counter-rotating crankshafts, dual conrods with patented Spaceball design in a compact aluminium block, which helps to reduce the vibration and noise of the engine,

which is a characteristic of diesel engines. These unique characteristics of the engine also have the added advantage of the engine being free of operation and steering torque, a characteristic of conventional engines. This quiet, low vibration and easy-to-handle engine helps to reduce operator fatigue in the working environment.

Cost of ownership is usually top of mind when a new engine has to be purchased, which includes daily fuel costs, insurance as well as the periodic inspections and maintenance that is required. With a fuel consumption at wide open throttle (WOT) of below 12L/hour, the Dtorque uses around half the fuel of a typical 70Hp four-stroke petrol-powered outboard. The low fuel consumption rate, together with service intervals of 250 hours, relates to fewer refuelling stops and a further operational range for the vessel with the same work rate as a comparable four-stroke petrol outboards of 70Hp. The expected lifespan of around 10 000 hours is a testament to the Dtorque's dependability and robustness as can be seen in the Aquaculture and small fishing operations in Portugal, Croatia and Spain.

The Dtorque is available in two shaft lengths of 20" and 25" and can be steered either remotely or by a proprietary tiller. Other accessories available for the Dtorque include fuel tanks, controls (single or dual), tachometer, fuel meter and range of propellers for both planing and displacement purposes. The engine comes complete with mounting kit, 5m fuel hose, diesel pre-filter and battery harness.

Seascope Marine Services is the authorised distributor for Dtorque 111 in South Africa and Sub-Saharan Africa. They are ideally situated in Paarden Eiland, Cape Town and their fully-trained and qualified staff can service or repair, not only all their own products but any diesel marine propulsion or auxiliary engine. Additionally, their service is not restricted to South Africa only, but they service clients anywhere in the world. Technicians and staff are continuously trained, both inhouse and abroad, to the OE manufacturers' standards, ensuring all work is done to the highest quality.



SAFETY WITHOUT COMPROMISE

HIGH TORQUE AT LOW RPM

LOW NOISE AND VIBRATION

DURABLE & RELIABLE

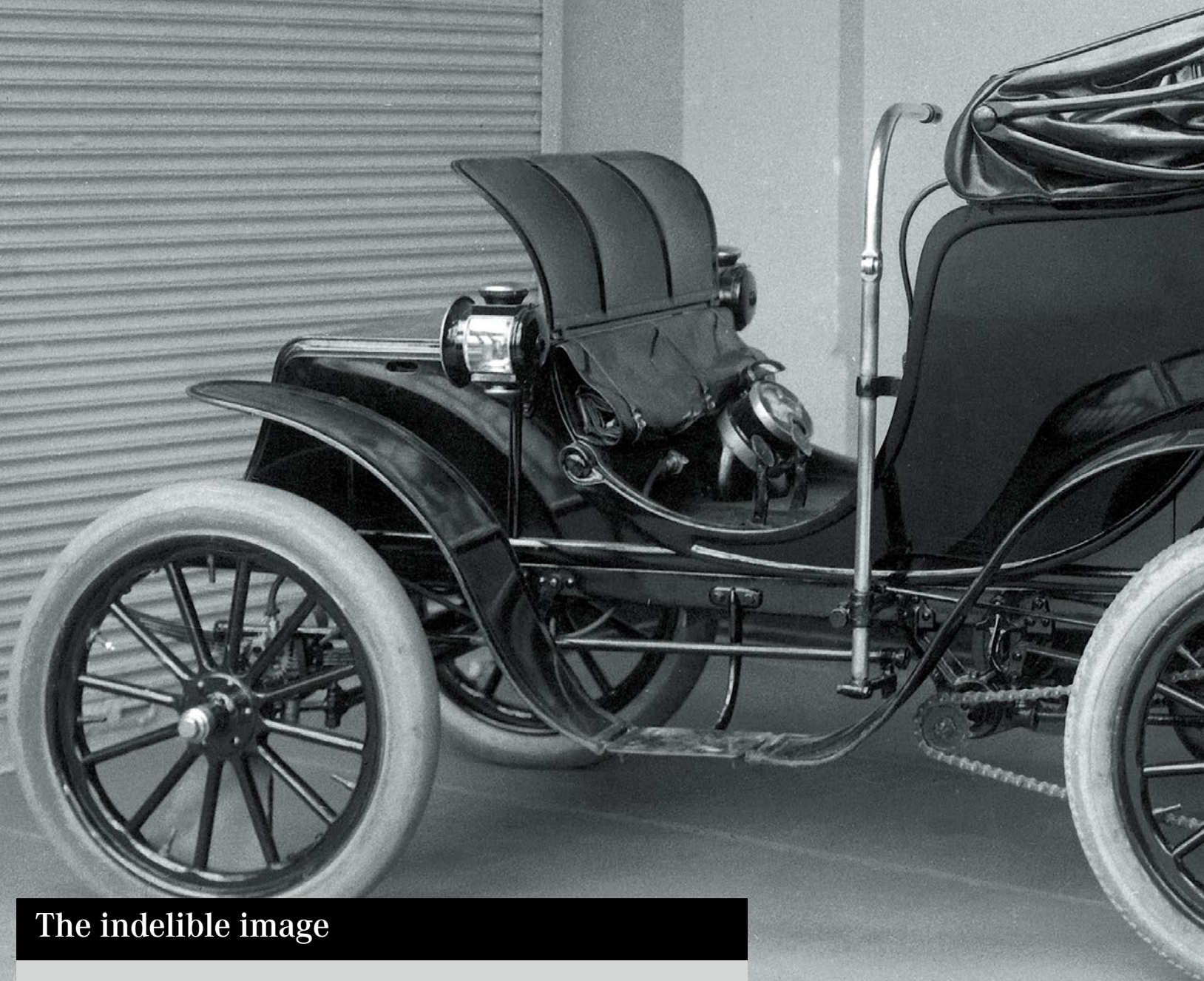
FUEL ECONOMY AND RANGE

SOLAS (MOB) CERTIFIED



124 Service Road, Marine Drive, Paarden Eiland, Cape Town 7405
+27 (0)21 511 8201 | jdejong@seascopemarine.co.za | www.seascopemarine.com.za

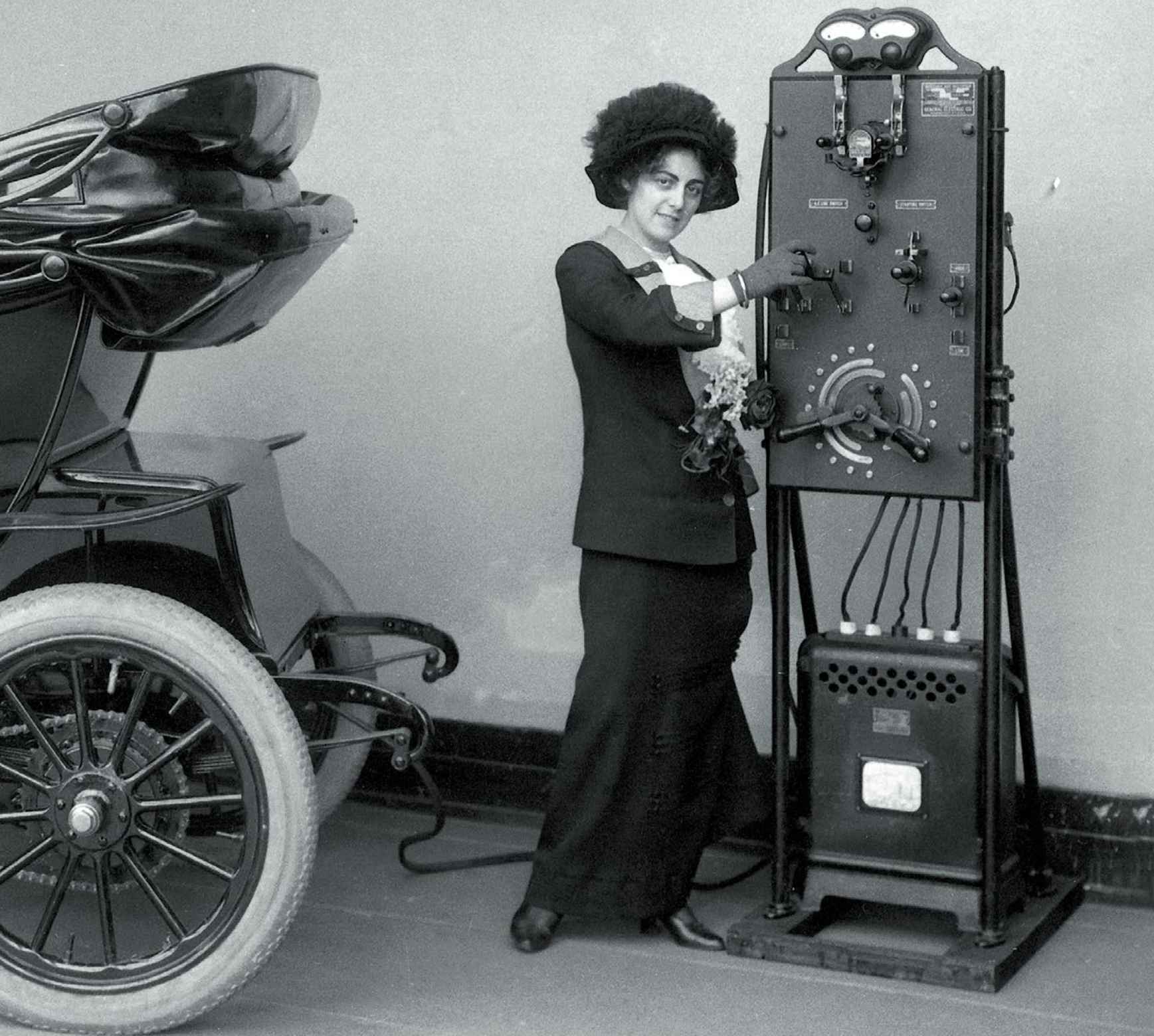
Distributed by **YANMAR**



The indelible image

A young woman uses a hand-cranked battery charger to charge her electric Columbia Mark 68 Victoria automobile. The Pope Manufacturing Company of Hartford, Connecticut, made the car in 1906 and the charger in 1912. Electric cars enjoyed great success in the early years of automobiles, but were later eclipsed by those powered by internal-combustion gasoline engines, which did not require frequent recharging.

(Photo by Schenectady Museum; Hall of Electrical History Foundation/CORBIS/Corbis via Getty Images)



Charity starts at home, but is that where it should stay?

I recently caught up with Neeltje du Plessis, lecturer in communication management at the University of Pretoria. She is busy working on a new textbook with a chapter about the impact of isolationism on the corporate social responsibility (CSR) of a country.

The whole concept of isolationism intrigued me, as it speaks to four of the 10 elements that we take into consideration when measuring an organisation's reputation (strategic intent, strategic alliances, value offering and corporate social investment).

For starters, I must admit, I had to do a quick Google search to get to grips with what exactly isolationism means. Broadly speaking, it has to do with foreign policies institutionalised by leaders who are of the opinion that their nation's interests are best served by keeping the affairs of other countries at a distance. The most relevant example of this is US President Donald Trump's "Keep America Great" initiative, where the core focus is on investing in American companies and levying high taxes on imports.

Many, if not all, African countries are dependent on foreign investment and especially social investment grants and many would not survive without them. How will we be impacted in our own country if we were to adopt an isolationist view? What would happen if we implemented isolationist policies? Would we be shooting ourselves in the foot, or would we share even bigger returns and foster greater opportunities for ourselves? Why are we not investing more in our own talent and industries?

Travel to any European city and you might be astounded by the beautiful fruit and vegetables on display at their supermarkets, take a closer look and you will see that it comes from South Africa. We have so much to give in terms of

magnificent produce, natural resources and talent, and yet we often relinquish it without our own people seeing it.

In the same vein, not having clear governance and policy structures in place to protect what we have can also ruin our own industries. For example, a few years ago, South African chicken farmers were crippled by the import of chickens and chicken products from Zimbabwe.

Similarly, in an era of isolationism, we need to be very mindful of this balance. If we focus too much on isolating ourselves from the rest of the world, we may be cutting ourselves off from the global trade opportunities and learning new skills and trades.

With that said, we must keep true to our own identity and first look for local opportunities and businesses to invest in before importing

If a company follows a more globalised approach in its business model, its CSR decisions might include projects with a more global focus, while a more inward focus could bring more benefit to local community-based organisations

There was absolutely nothing wrong with our chickens; the imported chickens were just cheaper. If there was a lack of chickens in South Africa, then importing and supporting the neighbouring country's economy makes sense. But we first need to get our own economy on its feet. If you are importing and not supporting the local market, you are not furthering the country's economy. Isolationism touches not just on overseas markets but also our African neighbours that we all want to see grow while maintaining our own strengths.

It all boils down to balance. When we measure reputations, all the different elements that we consider (10 of them) need to be in balance.

products. If we take another example, cheap clothing from the east has ruined the fabric industry in Africa: it is a lot more affordable to buy imports than to invest in locally made fabric and tailors, and now we are losing those skills, which have very much been a part of the African cultural fabric (pun intended).

We should be looking after our own people first; it does not help to create wealth for other countries and our own people are starving. We need much tighter regulation and policies regarding importing goods.

What is the reality of isolationism on South Africa and Africa?

Africa is expressing a definite desire to find and communicate a strong African identity: independent of colonial influence, yet relevant in the modern world. African leaders want to take Africa into a significant place in the world economy and culture within the next 30 to 50 years, but on its own terms. This process includes finding an alternative to the Western/US business capitalist business model through an Africapitalism* model that can combine economic and social wealth equally; again, finding balance.

In the UK and USA, the desire for isolationism started as social movements with anti-globalisation protests and protest votes against 'giving it all away'. This has been actioned with Trump enforcing isolationist policies and the Brexit vote that took place. In Africa, we are currently in the social movement stage. However, while the social movement media is focused on decolonisation as Africa deals with its colonial past, it is very concerning that governments seem to be selling vast tracts of land to Chinese interests.

Why is it important to know about this?

Consultants, business leaders, academics and new entrants in the world of work need to take note that the worldview that governs relationships is changing. The rules are changing. Success is measured differently. We are already in an era where the integrated report emphasises the social and environmental value that the corporation added during the financial year, apart from merely its financial performance. Corporations are taking a lot of care in terms of the kinds of programmes they are involved in and the partners they choose for creating social and environmental value.

Delving deeper: how does this relate to CSR and why is this important?

One aspect of business that is affected by isolationism is CSR, a key reputational element. Isolationism may affect the number of resources committed to CSR programmes, the scope of these programmes and the type of programmes that will be supported through CSR programmes.

These questions are important for non-profit organisations, community-based organisations and vulnerable communities, as they must understand how corporates make decisions about who to support with their CSR initiatives. For example, if a company follows a more globalised approach in its business model, its CSR

decisions might include projects with a more global focus, while a more inward focus could bring more benefit to local community-based organisations. This is a simplified version of possibilities but it illustrates the influence that a more isolationist worldview could have on CSR decisions on a basic level.

The good news is that in many instances, government isolationist policy such as the USA policies, do not influence USA corporate policies. Therefore, American companies active in South Africa will still make their CSR decisions based on business principles, led by investor pressure and stakeholder relations in their immediate environment.

What does isolationism mean for Africa?

This is not the end of the story. We are on the brink of developing new ways of doing business and communicating to manage the expectations and report on the impact of business success. The new way of doing business will be CSR and communication led, and it will come from Africa to teach the world the balance.

So, are we in favour of isolationism or not?

Isolationism by the USA, Europe and the UK can hurt African countries in terms of government-funded programmes as government policies change to focus more on internal spending and development.

Multinational corporations are still motivated by shareholder, stakeholder and reputational risk factors and will continue to invest in CSR programmes in the local communities, but their success will determine the amount, scope and focus of the programmes.

Africa's desire to take control of its own narrative and its own development might include measures to encourage local business interests over those of multinationals, however, African governments will define local businesses in their quest to decolonise, which might mean that the scope of some international companies' activities might be reduced where local companies are given preferential treatment in terms of tariffs and taxes.

A new Africapitalism business model might indicate that CSR becomes a major strategic determinant of decisions in African businesses, which means that African isolationism is eventually a good thing for CSR, but that it may take a long time.

*Elumelu, T. O. 2011. Africapitalism: The path to economic prosperity and social wealth. ▲

REGINE LE ROUX



Regine le Roux is the Managing Director and founder of Reputation Matters. She holds an M.Com degree in Communication Management from the University of Pretoria. She is a corporate reputation specialist and handpicks and manages several teams that conduct reputation research studies and implements business communication strategies. Regine is the author of: Reputation Matters, Building blocks to becoming the business people want to do business with. Regine is the Chairperson for the Western Cape Public Relations Institute of Southern Africa (PRISA) Committee, and on the Board of the Rotary Club of Newlands, responsible for Public Image, and chairs Rotary International's Public Image for District 9350. Over weekends you will find her donning her pink skort for the Hout Bay Harriers.

completely new. Innovation is also about the small achievements that make everyday work more efficient and simple. Some of the most interesting innovations I hear about are when a team thinks creatively and differently about an existing process or approach that has served us well for years but needs a refresh. This could be to keep up with customer or user demands, or simply to make it easier for employees to go about their everyday work.

That's why a business that wants to be successful must focus on achieving innovation within not just its core business, but across all its functions. Innovation needs to be cascaded throughout the company with the responsibility placed in everyone's hands to innovate and think differently in the work they do.

Which brings us to the second question.

Can innovation be taught?

This is a question that human resources leaders ask themselves all the time—and at Mastercard, we firmly believe—yes. But for innovation to happen at all levels of the company, it is necessary for a range of enablers to support this: talent development, organisational design and structure, and evolving our thinking on leadership.

Regardless of their job, employees must have access to the knowledge and tools to innovate every day, and enjoy a culture in which people feel empowered to try new things. Training employees across all functions on the latest technological innovations and tools is also crucial. It is only then that they can progress on new ideas like Design Thinking, which can be applied within their own fields of expertise.

For instance, at Mastercard, we are leveraging virtual reality (VR) to help deliver sophisticated training solutions for our people. A practical example of this is the training programme we have developed for our sales force, where VR is used as a realistic and immersive environment for our sales teams to experience engaging with a customer. We also recently followed a start-up over the course of a year to video document their business journey, which we built into a training programme for our emerging leaders. The video documentary provided real situations the start-up was facing, which our emerging leaders

needed to make decisions on and could then see the real-life consequences of those decisions.

Artificial intelligence (AI), too, has its own use-cases in HR. The technology is showing significant potential in resource management, organisational planning and identifying required skillsets across markets. By leveraging data analytics, AI enables an organisation to identify the current set of skills in their workforce and where there may be future gaps, ultimately helping to inform where investments need to be made for additional resources.

Ultimately, focusing on people is key

While it presents several benefits, the use of technologies like AI and VR will not do away with people in HR, but rather complement them and enable them to achieve more innovation within this space.

But technical skills are only part of the equation. An organisation's ability to deliver results now and in the future will depend on building and maintaining a winning culture. That foundational premise and commitment help to attract the best people from diverse backgrounds.

One of the key parts to this is a sincere commitment to inclusion and an employee experience that creates a sense of community, unified purpose and belonging. Everyone can and should feel that their voice is heard and valued.

This care and respect for people at an individual level are what encourages unique insights, new ideas and a passion for the work we do, and that ultimately drives innovation.

After all, the greatest technology will need bright, dedicated people to continually advance the conversation and think about what's next. It's for that reason that people should remain at the core of innovation. ▲

[1] <https://www.dw.com/en/globalization-40-just-another-davos-buzzword/a-47184316>

[2] http://www3.weforum.org/docs/WEF_EGW_FOJ_Africa.pdf

[3] <http://reports.weforum.org/future-of-jobs-2016/chapter-1-the-future-of-jobs-and-skills/>

[4] http://www3.weforum.org/docs/WEF_EGW_FOJ_Africa.pdf

CARYS RICHARDS



Carys Richards, Senior Vice President of Human Resources, Middle East and Africa at Mastercard. Carys is an experienced HR leader with experience in the technology, financial and professional services sectors. Her experience to date spans across leading HR functions in large complex multinational businesses to a small fin-tech organisation focused on driving culture change and business transformation, leadership capability and development, reward management and top talent attraction. Carys has been with Mastercard since 2014 and has previously held a few positions spanning from Regional Recruiter to HR Manager for various companies, including Clyde & Co, Admiral, Hays and the Morgan Retail Group. She is passionate about driving the business agenda through building a world-class, next-generation workforce

Would you and/or your organisation like to be part of the prestigious BBQ Awards, where we honour the best of the best in empowered business?



A large-scale event scene at Emperors Palace, featuring a stage with a BBO Awards backdrop, a large audience seated at round tables, and a complex lighting rig with green and blue spotlights. A large red and white logo is overlaid in the top right corner.

BBO **AWARDS** **EST. 2002**

**We toast to this victory
on 19 March 2020 at Emperors Palace.**

NOMINATIONS ARE NOW OPEN

**For more information, please contact us:
on 021 681 7000 • info@bbqawards.co.za
visit our website www.bbqawards.co.za**

G+D Mobile Security **loves Africa!**

**We are where your
customers are.**

G+D Mobile Security, a part of the G+D Group with more than 11,000 employees worldwide, opens up a new personalisation bureau in Johannesburg, South Africa. With 5,300 experts in over 40 sales and partner offices all over the world, we are now happy to advise and support this growing region with years of experience and comprehensive solutions locally. This will enable you in meeting the challenges of the digital transition in the financial industry and to capitalize on its opportunities that is happening as we speak.

In August 2019 we are launching this new personalisation bureau as a step in investing in an evolving region and putting our customers first: we are where your customers are!

For more details get in touch with our Johannesburg office.

Giesecke and Devrient Mobile Security
Southern Africa (Pty) Ltd
P +27 (0) 87 754 4260
events.gdsafms@gi-de.com

Follow us on:



smart!

www.gi-de.com/mobile-security