

A-G report pinpoints R32 billion 'irregular' expenditure

- A pathetic 7,3% of municipalities get a clean audit
- Report reveals R32 billion of irregular expenditure, R7 billion more than 2017/2018
- False declarations by suppliers and non-disclosure by employees amounted to R644 million
- Cost of consultants to assist in financial statement preparation=R1,26 billion, even though only +/-R500 million was justified

THERE is not much cheer in the Auditor General's latest report on the performance of local government, however the Drakenstein Municipality has once again been acknowledged for the way it runs its financial affairs. The Municipality is the largest municipality in South Africa and the only one of the country's 19 secondary cities and eight metros to receive a clean audit opinion for the 2018/19 financial year.

In the Consolidated General Report on the Local Government Audit Outcomes released recently by Kimi Makwetu, Auditor-General of South Africa, for the 2018/2019 financial year, Drakenstein Municipality is described as one of the municipalities that



Drakenstein Municipality covers Paarl, Wellington, Gouda, Hermon, Saron and Simondium.

display leadership with a desire and commitment towards clean administration.

Out of a total of 257 municipalities countrywide, the Auditor-General singled out only 20 that told a story of how well a municipality is managed. Thirteen of these municipalities are in the Western Cape and include Drakenstein Municipality, the Cape Winelands and West Coast District Municipalities, and the Bergrivier, Cape Agulhas, Cederberg and Hessequa Municipalities.

Irregular expenditure & consultants fees - the culprits by Province.

Province	Logged	Plus flagged for audits finalised after the report cut-off date	Consultants fees for financial reporting
Eastern Cape	R2,5 bn	R4,2 billion	R118 million
Free State	R1,4 bn	R341,6 million	R46 million
Gauteng	R1,7 bn	R3,3 billion	R341 million
KwaZulu Natal	R6,5 bn	R17,2 million	R95 million
Limpopo	R1,5 bn + R1,2 bn VBS loss.	R594 million	R249 million
Mpumalanga	R1,09 bn	R358 million	R98 million
Northern Cape	R390 m		R47 million
North West	D2.7 hp	D1.9 hillion	D007 million

"The safe and clean hands that can be relied upon to look after the public's finances in local government are few and far between" – A-G

Makwetu acknowledged the efforts of those municipalities that tell the story of disciplined spending that achieves value for money; meticulous billing and collecting practices; assets that are maintained and safeguarded; careful investments and savings for emergencies and future projects; and commitments to creditors and the community being honoured.

"The best practices at these municipalities included a stable leadership that is committed to a strong control environment and effective governance. Continuous monitoring of audit action plans in order to timeously address any audit findings and a proactive approach to dealing with emerging risks were also common features at these municipalities," says Makwetu.

According to the Consolidated General Report on the Local Government Audit Outcomes, Drakenstein Municipality is one of five municipalities that illustrate "a leadership with a desire and commitment towards clean administration. The management is

Philippi community, farmers to benefit from R40 m investment



THE City is now going ahead with agreements that will see R40 million of grant funding invested in the Philippi Agri-hub Project in Philippi East.

The City marked the launch of the project at the Philippi Fresh Produce Market facility with the signing of the agreement with the Philippi Economic Development Initiative (PEDI), a nonprofit company and local implementing partner of the City.

'The purpose of the project is to revitalise small and medium-business urban farming, offer training, and increase job opportunities in Philippi. This investment comes at a time when COVID-19 is threatening the health and livelihood of local communities. Collaboration between the local government, communities, the private sector and nongovernmental organisations is needed more than ever before in strengthening our resilience and overcoming challenges,' said Alderman Dan Plato, the City's Executive Mayor.

The project is located within the Philippi Opportunity Area, and consists of three components:

- an expanded and upgraded agri-processing and packaging plant with the necessary equipment and technology to enable a variety of processes;
- an expanded waste-to-fertiliser manufacturing facility, including earthworm farming, that will assist in reducing solid waste volumes at landfills and benefit the environment; and
- a modern agri-training facility and support centre, offering a wider variety of training and skills development programmes related to small-scale organic farming methods

Western Cape	R2,7 bn	R0	R42 million
North West	R3,7 DN	R1,8 DIIION	R227 million

Continued on P2

and principles, as well as business development and support services



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responsive to our findings while specifically addressing the root causes identified; they also respond with the same rigour to internal audit findings as they do to external audit findings. They all have functional municipal public accounts committees and councils who carry out their duties effectively and hold their respective municipalities accountable."

The same however cannot be said for the vast majority of municipalities in South Africa. The report narrates a story of how the efforts of the diligent municipalities has been completely overshadowed by the overall regression in audit outcomes. In total, 91% of the municipalities ing to submit a report, which according to the regulations, is illegal. The level of irregular expenditure rose by R7 billion from the previous financial year to R32 billion.

Last year, Drak-enstein Municipality was officially rated by National Treasury the Number One most financially healthy city in South Africa and in the Western Cape. In June this year, Drakenstein Municipality's Internal Audit function underwent an external quality assurance assessment that assessed the function's compliance with the Standards and Code of Ethics. It was awarded Generally Conforms, the highest rating on

Crookes fruitless endeavours

Crookes can realise

anything near the orig-

inal purchase price for

High Noon. The value

of agricultural real

estate has tapered off

in the wake of uncer-

(expropriation without

compensation) policy

for land reform. High

Noon has also clearly

not yielded a bountiful

on its annual finan-

cial statements, said

it was looking for an

improved performance

from the remaining

deciduous fruit assets

in the financial year

Revenue for the

deciduous division is

generated from deliv-

ery to Two-A-Day Group (TAD), the

Crookes, in forward

comments

harvest for Crookes.

around the

EWC

tainty

looking

ahead.

government's

A G R I B U S I N E S S Crookes Brothers, which has been actively trying to diversify from its traditional sugar farming base, has taken a big step back on its deciduous fruit foray in the Western Cape.

Cape. In the financial year to end March, Crookes reported that its deciduous division reported an operating loss (after a biological asset fair value adjustment) of R19.2 million compared to the R10.1 million profits harvested in 2019. The group reported

The group reported that the average prices achieved on the 2019 crop were 16 % down on estimate - primarily due to smaller fruit size and overall quality. Crookes believed this was the result of the knock-on impact of the 2018 drought experienced in the Western Cape.

The 2020 crop harvest was lower than expected and only marginally higher than the 2019 crop, partially due to hail-storm damage suffered in the fourth quarter. Crookes also

reported deciduous prices being flat com-

pared to the prior year. This meant revenue was unable to offset the inflationary increase in operating costs, which caused the loss in the division.

The Crookes board has now resolved to sell its High Noon deciduous fruit farming venture. The group said a number of parties have expressed an interest in acquiring the assets.

Crookes bought High Noon – situated near Villiersdorp from the Ovenstone family in 2013 for R103 million.

High Noon comprises mainly farming land on the Elands River in the Kaaimansgat Valley. At the time of the purchase, this was considered to be a prime deciduous producing area "due to its unique micro climate and high-potential soils".

The acquisition increased the area under deciduous fruit owned by Crookes to more than 600 ha, which purportedly allowed the group to take advantage of "resultant economies of scale".

CBN would be Group (TAD), the intrigued to see if fruit exporting and



marketing organisation, as well as Elgin Fruit Juices.

TAD is the exclusive buyer of the Crooke's deciduous fruit, and the group holds a roughly 17% stake in TAD. Crookes noted: "Whilst Covid-19 has cast uncertainty over the deciduous fruit market and trade and exports throughout the world, TAD have taken forward cover on 50% of their crop at a rate of approximately R15.30

to the US Dollar." Crookes added that Europe and China's demand for deciduous fruit over the next 12 months would be critical. "Whilst the fruit can be stored in cold storage for up to a year, when demand does eventually return, it is hoped that South Africa will be at the front of the queue." But the group acknowledged that a risk does exist that buying countries may look to whoever can provide a more fresh supply.

One bright spot is that the value of Crookes' investment in TAD – which functions as packhouse and marketing facility for a number of fruit growers in the Grabouw/ Elgin region – has grown markedly.

Crookes indicated that TAD had invested significantly in packing and storage infrastructure, and marketing and logistics facilities over many years. This effort was paid for by the members as a deduction from deciduous revenues.

Crookes has a participation right in TAD determined by its prorata contribution to TAD's throughput.

Crookes noted that TAD carried a net asset value of R453 million (up markedly from the R375 million recorded in 2019). The group has a 16.68% shareholding in TAD, which infers its share of that value is a not insubstantial R75 million.

sot to join landn

ADB set to join landmark \$20 billion Mozambique LNG financing



THE African Development Bank has concluded its bid to co-finance the construction of Mozambique's integrated Liquefied Natural Gas (LNG) plant by signing a senior loan of \$400 million for the transformational project estimated to cost over \$20 billion, is ranked Africa's single largest foreign direct investment to date. It comprises a global team of energy developers and operators, led by Total alongside Mitsui, Oil India, ONGC Videsh Limited, Pharet Patroleum

national oil and gas company, ENH.

With the signing on 15 July, the Bank joins a global syndicate of commercial banks, development finance institutions and export credit agencies to provide the requisite financing for the project. Financial close is expected later in 2020.

The project, which benefits from one of the world's largest natural gas reserves off the coast of northern Mozambique, will be the country's first liquefied natural gas development. It will initially consist of two LNG trains with a total capacity of around 13 million tons

the energy sector in Mozambique, the project is expected to have broader socioeconomic benefits for the country.

The project comprises both onshore and offshore components, which will be funded by a combination of equity, pre-completion cash flows and over \$14 billion in senior debt facilities. The senior debt consists of a mix of Export Credit Agency (ECA) direct loans, commercial bank loans and the facility from the Bank, the only multilateral development institution involved in the

project's first phase. comes. In total, 91% Videsh a scale of three ratings Wale Shonibare, the of the municipalities prescribed by the Insti-Bharat Petroleum, Bank's Director for per annun did not comply with tute of Internal Audi-The Mozambique PTT Exploration, as As well as being Energy Financial LNG Area 1 Project, well as Mozambique's transformational for legislation, some failtors. Solutions, Policy and

Regulation, said the project would create a new energy model in Mozambique and help to electrify Southern Africa." Through the availability of domestic gas, the project stands to facilitate the development of gas-fired electricity in Mozambique. This will play a key role in providing reliable and affordable energy for the country and the wider region," said Shonibare.

Overall, the project will improve livelihoods, spur economic growth and boost universal electricity access, in line with one of the Bank's High 5 strategic priorities, Light Up and Power

Africa, Bank officials

said.



Spur has a strong stomach for turbulent times

RESTAURANT franchisor Spur Corporation, one the Cape Town's greatest business success stories, is hastily trying to get things back on the boil after a damaging impasse during the prolonged Covid-19 lockdown.

Even with restaurants open for business under the current lockdown level, the banning of the sale of alcohol as well as capacity constraints - due to social distancing requirements - will continue to play havoc with the business model for the ensuing months.

Aside from its eponymous steak house brand, Spur also owns Panarotti's pizza and pasta, seafood business John Dory's, the Hussar Grill and gourmet burger business Roco-Mamas.

Spur-unlike its rivals like Famous Brands (Steers and Debonairs) as well as Burger King, KFC and McDonalds -is more of a sit down

eatery concept than a business that caters for takeaways and convenience meals.

To top at all, Pierre van Tonder, Spur's long serving CEO, has opted to take retirement after 24 years as the boss and a nearly 40 year career at the group.

CBN suspects the retirement of Van Tonder (in his early sixties) – despite his enduring tenure – caught Spur's board by surprise. No successor was named for Van Tonder, and Spur has indicated it is looking for suitable candidates for CEO internally and externally.

There is some reassurance, however, that Van Tonder will remain on-board until the end of December.

Spur Corporation chairman Mike Bosman said the business has shown strong growth under Pierre's leadership over the past 24 years, with the group now a market leading, multi-

over 640 restaurants in South Africa and a global presence in 20 countries.

"Pierre has overseen the expansion of the brand portfolio through the in-house development of brands including Panarottis and the acquisition of smaller brands like RocoMamas, The Hussar Grill and John Dory's which are today among South Africa's most recognised restaurant brands." Spur, which was in

the fortunate position of still holding a heap of cash at the start of lockdown at the end of March, expects that the number of local restaurants trading will have increased to 495 by the end of July. Most will be operating a full sitdown service.

But Spur's sales update for the year to end June 2020 was dismal. The group reported total franchised restaurant sales declined by 22% to R6

brand franchisor with billion as the Covidglobal pandemic 19 and resultant trading restrictions in all countries of operation hampered trading in the last four months of the financial year.

All local restaurants ceased trading on March 27 when lockdown officially took effect. But Spur reported that there were also significant declines in turnover in the weeks leading up to the lockdown. Restaurants could commence trading on a deliveryonly basis from the start of May with a customer collection service permitted from June. Full sit-down service was only resumed on June 29.

A dig down into Spur's latest trading statement showed Spur Steak ranches sales down 22.5% for the 12month trading period to end June. But sales were down 91% in May and 87% in June.

Equally hard hit were John Dory's (down



tomer anxiety about

contracting the virus

and growing personal

financial stress - had a

detrimental impact on

Spur's ongoing part-

nerships with third-

party delivery services

Mr D Food and Uber

Eats had also been key

in driving customer

at this time is on sup-

porting our franchi-

sees. We are discount-

ing franchise and

"Our primary focus

Van Tonder said

business.

support.

95.7% in May and 89% in June, the Hussar Grill (99.8% and 97.5%) and the pizza/ pasta category (88.9% and 82.8%)

Interestingly Roco-Mamas fared best with May sales only down 52.9% and 53% in June.

In total, Spur's local operations saw sales decline 87% in May and 84% in May.

Tonder Van explained that the restrictions on the sale of alcohol and the curfew - together with cusmarketing fees and granting extended payment terms for certain debts.'

overall, it's But going to be leans days ahead. Van Tonder noted grimly: "The reintroduction of a total ban on alcohol sales in July together with the curfew will negatively impact trading. The grim economic outlook for the country is also likely to result in a protracted period of recovery for the restaurant industry."

Quantum: the nest best thing

WELLINGTONbased Quantum Foods which has quietly built niches in poultry, animal feeds and eggs - has suddenly become very hot property.

The last time CBN wrote on Quantum, (the June edition), the company was worth around R600m. At the time of writing Quantum's market value had soared to close to R1.4bn.

What triggered a feeding frenzy at Quantum was a decision by its major shareholder, PSG controlled Zeder Investments, to sell its 31% stake in the business to poultry giant Country Bird Holdings (CBH).

No sooner had the

ink dried on that deal, and other suitors started crowing for Ouantum shares. What transpired was that international investor Silverlands which has a specific focus on African agribusinesses – managed to coax other large shareholders to sell their shares. In the end Silverlands managed to scrape together a 32% stake in Quantum.

But the feeding frenzy continued. A number of Quantum directors - including chairman Andre Hanekom (the former CEO of Pioneer Foods) and CEO Hennie Lourens – also snapped up large par-



cels of shares. This meant senior management and directors spoke of a significant minority stake in the business – which is an important development remembering CBH and Silverlands have roughly similar sized stakes.

Then, out of the blue, SA's biggest poultry business, Astral Foods, swooped, and snapped up a 6.4% stake in Quantum as well!

Naturally all these forays saw Quantum's share price on the JSE effectively double over just a few weeks.

At this juncture it seems CBH's plans to make a full takeover bid for Quantum have been foiled by the emergence of other large shareholders.

CBN is certain Quantum executives would prefer not to have a larger rival like CBH in control of the company, and perhaps re-setting the operational strategy. Gut feel is that Quantum management would be happier to work with a strategic shareholder Silverlands like which is a major shareholder in another SA agribusiness, Crookes Brothers (which is covered elsewhere in

this edition).

While Quantum is small player in the local poultry market, the group holds an important strategic position as a supplier of day old chicks to Astral Foods and Uitenhage-based Sovereign Foods.

Astral CEO Chris Schutte was on record saying that the material change in the shareholding of Quantum raised concerns that the current broiler supply agreement with the company could be jeopardised over the long-term.

Quantum supplies approximately 30% of Astral's live broiler chickens processed in the Western Cape, which equates to about 12% of the total broilers being slaughtered by Astral.

Schutte explained: "If there is to be a change in control of Quantum, it could adversely impact the broiler supply agreement with them, and Astral would most probably have to consider a significant investment in broiler production capacity to ensure the continued supply of live broiler chickens to its County Fair operation in the Western Cape.'

He said the rationale for acquiring a minority stake in Quantum was to ensure that Astral's current armslength medium to long term supply agreement with the group remained intact.

Expansion joints in flooring

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in dilation joints and joints in both interior and exterior pedestrian walkways. This sealant delivers all

degradation and weath-

Dimensions (www.denbraven.co.za) or go to their FaceBook page (Den Braven Sealants South Africa) to watch how to seal a paving joint using Hybriflex-540 and backing cord.

the benefits of elastic

ering as well as excellent as a bond breaker. adhesion to a wide range of substrates with minimum surface preparation. Den Braven Poly-

these sealants in joints, and tiled edges, from Den Braven Hybriflex cracking. It also has a -540 is particularly very high tear resisthard wearing and ideal ance also being rathin helping prevent the er impervious to oil,

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SALGA is not an innocent in municipal swamp

• R22billion stolen from the taxpayer • No prosecutions

Comments Geoff Jacobs, President of the Cape Chamber of Commerce & Industry.

IN the seven years that the Auditor General, Kimi Makwetu, has been examining the books of all 278 municipalities to make sure their office holders are looking after public funds, there has not been a year without horror stories of mismanagement and theft from the public purse.

Yet, no one has been brought to court, found guilty and punished for what is often bald, unadulterated theft of other people's money. The latest tally is R22 billion lost to theft and vandalism and payment for goods and services never received.

gaining

ent

The victims are, of course, the ordinary citizens who pay taxes.

Instead, the public have heard a litany of official euphemisms - like those excuses indulgent parents make when apologizing for their unruly children running riot at a garden party, drunk on wine

dregs from abandoned glasses. after year Year the same things are revealed. Mr. Makwetu described most municipalities as "crippled by debt... unable to pay for water and electricity; having inaccurate and lackluster revenue collection; expenditure that is unauthorized, irregular, fruitless and wasteful; and with a high dependence on grants

assistance from and national government". other In words. behaving like teenage children, who in the



words of P J O'Rourke, the American satirist, have been given whiskey and car keys.

But what Makwetu didn't mention was the role played in our municipal shambles by the South African Local Government Association (SALGA) and the various trade unions that affect all municipalities, even those with clean, or almost-clean. audits. SALGA

through as a major cause of the problem. It's because SALGA operates as a white-collar trade union for municipal workers but happily abides by whatever wage agreement the trade unions come to in their pay negotiations.

SALGA members have their cake and eat it. As management, they also benefit from a national agreement binding on all municipalities. So, if the unions wangle a salary increase of 6% across-the-board for their members, the managers happily accept that same percentage as top-up to their muchhigher salaries. And shrug if any ratepayers dare to ask why.

applicator.

braven.co.za.

This annual bonanza has nothing to do with performance. It means incompetents can run a municipality into the ground and still get paid as if they were paragons of financial and managerial virtue.

It is an especially happy circumstance for managers in the larger metropolitan areas. Not bad either for those operating managers (or pretending to) in smaller towns (and we know how hard it is for them to get by).

SALGA seems to be only slightly embarrassed about this, judging from the reaction of its president Thembi Nkadimeng, who said in reaction to the auditor general's latest stinging condemnation of municipal finances that "there was an urgent need to speed up the review of the fiscal framework of local government.

"We will have to look into discussions of how best we can release ... funds to these municipalities while enforcing compliance. If we don't do that, the indication is (sic) deteriorating financially and will continue, and this will put difficulty on our community.'

If anyone can translate that insipid, couldnot-really-care-less statement into a call to root out municipal corruption, then it is proof that hope springs eternal, pigs can fly, and nothing will be done until there is nothing left to steal.

It just happens that president of SALGA is also a beneficiary of the 6% annual increase club.



IO-Link: Industry 4.0 for everyone

IO-Link is not just increasing acceptance in an ever greater number of applications - the manufacturer-independcommunication technology is also an enabler for innovative sensor solutions and supports the global availability of data and information required by Industry 4.0. Switching devices and simple sensors, in particular, can benefit from this and fast and cost-effective data method of connecting entire plant or factory. to the data world. IO-Link not only estab-

The advantages of IO-Link from SICK Automation are readily apparent. Since devices can be integrated via the existing cabling, IO-Link enables Industry 4.0 solutions to be expanded down to even the smallest inductive sensors. What complex sensor systems can accomplish via a fieldbus connection can now be delivered by simple sensor technology: state parameterisation throughout the

lishes a reliable communication channel, it also allows IO-Link-enabled sensors to be integrated into any existing network.

Flexibility, transparency, and reduced costs

with Sensors an IO-Link interface can supply a wealth of information - process data, parameter settings, and detailed diagnostic data via the existing connection all in real time. They are also capable, for example, of receiving new parameter sets within seconds for flexible production right down to a batch size of 1. IO-Link offers continuous digital data transmission, thus superseding the classical method of analogue value transmission. It also has significant advantages with regard to electromagnetic compatibility as it allows standard non-shielded cables to be used, thereby reducing cabling costs.

IO-Link makes plug and play a reality

The different parameter settings can be visualised, tested, and, if necessary, optimised during integration and commissioning. Furthermore, it is possible to store different parameter sets in the automation system and upload them to the sensor during operation without any delay. This makes it possible to automatically and remotely configure sensors installed in locations that are difficult to access.

Machines and plants with frequent changeovers between product variants can particularly benefit from this functionality, which enables changeovers to be performed quickly and with a high level of process reliability. Replacing devices also becomes easier. If a sensor is defective, the most recently used parameter set can be automatically transmitted to the replacement sensor via IO-Link.

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Queue-management system for Level 3

BUSINESSES that plier, Sirena, available exclusively from Elecanticipate resuming troMechanica (EM). operations under Level 3 of the lockdown face SMART-Q is a lumithe challenge of not nous acoustic signalonly complying with ling device for queue social-distancing regmanagement. Its conulations, but ensuring figuration consists of that proper customa steady green light er-flow management with a 'beep' sound is in place. They may and a flashing red light consider an innovamounted on an extentive solution called sion and support base. SMART-Q from Ital-It is operated by means ian visual and acoustic of a battery in the base, signalling device supor by 230Vac mains

power. Battery power allows for eight hours of continuous operation.

Two modes of operation are available: In automatic mode, the duration of the greenlight period can be selected from two to 12 seconds. In manual mode, a simple remote control is used to change from green to red and then back again, all at the press

of a button.

It allows for effective and safe crowd management without any additional staff.

Convenient and easy-to-use, it empowers a business owner to decide when the next customer can enter, simply by clicking on the remote control button for the green light, or by setting a predetermined interval in automatic mode when

there are many customers. This enhances the safety of both employees and customers.

For more information contact Karen Zotter, Tel: (011) 249 5000 Email: karenz@em.co. za or visit www.em.co.za

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- All pricing excludes VAT.
- The promotion is valid from 1 July 2020 to 31 August 2020.
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- Free delivery is applicable to addresses within a 30km radius of the nearest Pienaar Bros branch. Distances beyond 30km may attract a delivery fee.
- The winner agrees to have their photo taken and the photo to be used in any Pienaar Bros or Bova Safety Wear marketing material.
- The judges' decision is final and no correspondence will be entered into.

CE

· Errors and Omissions Apply.

VSD's improve farm efficiency

BMG's Boer Slim/ Smart-Farming agricultural team works closely with farmers throughout Southern Africa, assisting them with the selection, installation and operation of new electromechanical systems.

Carlo Beukes, BMG's agricultural manager says "With the Smart-Farming initiative, we are assisting farmers with cost-efficient solutions to improve crop production output, to enhance efficiencies of every operation by conserving power consumption and to minimise downtime by implementing practical maintenance programmes. It is even more critical now to ensure there are adequate supplies of fresh foods for an anxious and vulnerable population. For this reason, we are also assisting farmers to expand production to include the supply of additional produce."

In a recent project, the BMG team assisted a local farmer who wanted to accelerate his tobacco drying process and expand crop production, but was restricted by power limitations. supply After the installation of BMG electronic variable speed drives (VSDs), the farmer is able to run 22 tobacco drying containers at once, where previously he could only run and between alternate nine drying containers at any one time. As a result, he has more than doubled his crop production output. Other positive feedback is there are no more noticeable voltage dips when the process is started



up and wear and tear on mechanical components is reduced. Production is also now less labour intensive, which reduces his shift costs. BMG has also

assisted a farmer in the Barkly West area, who

supply of only 200 kVA +/- 300 Amps, to significantly reduce the cost of irrigation per hectare.

After the installation of VSDs on all pump sets, the power supply is used more efficiently, resulting in improved crop pro-

duction and expansion of the farmer's supply of maize, to now also include pecan nuts. VLT Danfoss

AQUA Drive FC 202 - which offer VSDs additional saving energy savings compared with traditional VSD controls – have

designed for been water and wastewater applications, including irrigation. These VSDs have been fitted to all pumps in this installation and are controlled by pressure transducers that are set to match the varying demands of different irrigation requirements. The only peripheral component required was a pressure transducer. Pump controllers and valves were not necessary for flow control in this system.

Other notable features includes a soft start/stop facility, which prevents water hammer on starting and stopping the pumps, reducing the possibility of burst pipes and reduced wear and tear on couplings, pumps and pipes. These VSDs are

available from BMG

in IP55 enclosures, which do not require dedicated panels eliminating the need for additional cooling and ventilation.

BMG was responsible for the installation and commissioning of these projects and is an authorised DrivePro® service partner of Danfoss.

With a projected annual power saving of 155 491 kW/h, BMG expects the farmer to benefit from cost savings of approximately R108 444.00, with a payback time of less than 12 months.

company's The broad branch network offers original spares and advanced workshop resources that ensure all repairs to agricultural components meet pristine OEM standards.

Borehole water to communities

was limited by a power



ACCORDING to the Department of Water and Sanitation, more than 21-million South Africans do not have a regular supply of clean water. Clean water is vital in the fight against COVID-19 making access to clean water more urgent than ever. Magali Malherbe,

Lifeblood of a community.

Africa's rural commu-

COMBUSTION CONTROL WITH

Managing Director of MAMAS Alliance says: "Clean water is absolutely critical especially now during ships.' this pandemic; from washing hands to sanitising surfaces and also keeping hydrated.

struggle for the most vulnerable. Big business can assist through strategic CSI partner-

Ât the end of 2019, the MAMAS Alliance CSI team connected Atlas Copco to one of Lack of access in South its NGOs, Children of the Dawn where a borenities compounds the hole was successfully installed in the rural community of Mathabatha in the Limpopo province.. Over the last few years, municipal water started to dry up at the pipes and would be available only for a day or two, then nothing. As a result, Children of the Dawn had to buy water which was brought by truck, stored at the organisation's care centre in steel drums, and changed every few days.

This was neither sustainable nor safe. It also prevented the organisation from continuing with their gardening activities.

Children of the Dawn National Programme Manager, Nabila Noor Mohamed says: "Our organisation supports over 100 orphaned and vulnerable children as well as their family members in this community so it was a huge relief for us when the borehole was finally installed. MTH Drilling was the first to hit water after a few unsuccessful attempts by other companies. The impact of just this single borehole is the difference between life and death for so many people. We are so grateful to our sponsor. Without funding from the big corporates, it would be exceptionally difficult to make it happen."

The MAMAS Alliance is a network of 33 independent and autonomous grassorganisations roots which currently operate from 75 sites across South Africa, reaching over 60 000 children. The Alliance works in remote rural, semi-urban and urban areas across the country, providing structural and practical daily care to the most vulnerable and needy children. The CSI team assists with connecting the right corporate to the right project for the most impact.

Festival of Motoring Jhb postponed to 2021

MESSE Frankfurt South Africa has made the decision to postpone the Festival of Motoring to August 2021. The Festival of Motoring presented by WesBank is the largest automotive show on the African continent and the only national industry supported event endorsed by the National Association of Automobile Manufacturers of South Africa (NAAMSA).

"In light of the ongoing uncertainty around COVID-19 and its impact on the industry and the economy at large, we thought it in the best interest of all stakeholders that we postpone the event to 2021" says Joshua Low, Managing Director of Messe Frankfurt SA. "We pride ourselves

in putting together world class events and this decision has not been taken lightly. It is important that we support the industry and offer a platform that meets its needs. We have been engaging with the industry over the past two months and the view is that they would like to support the event and would aim to do so in 2021," adds Low.

Frankfurt Messe is in the process of finalising dates for next year's show and will make the announcement once these are confirmed. The show provides an ideal platform to showcase what the motoring industry has to offer and has become a favourite, not only among car enthusiasts, but also for event goers, families and a much broader audience in recent years.

NEO MONITORS LASERGAS ANALYSERS



THE BEE IN MY BONNET COLUMN Pass me that (Santam) umbrella

The Editor recalls...

THOSE who have ever started a business will be familiar with the analogy that banks offer you an umbrella when the weather is good and immediately want it back when it starts to rain.

Life they say is not for amateurs and this especially applies to entrepreneurs starting any business but particularly in the hospitality sector where the barriers to entry are low and risk is high.

It looks like it's all beer and skittles but a more realistic scenario is that your small business is like a cork on the sea being tossed about by even the smallest wave, until your cork morphs into something resembling a ship – able to resist the destructive waves that the business economy throws at you.

But wait, help is at hand!

Having an answer to just about any disaster is the mantra of the insurance industry, so long as you have the wherewithal to afford the premiums.

However when disaster does strike and a claim is registered, many have experienced a visit from the friendly loss adjuster, who actually isn't your friend at all and is likely paid a commission based on the amount he can save the insurer on a claim.

Worse still, as we have seen recently, many in the insurance industry are banding together to repudiate business interruption (BI) claims caused by the lockdown.

These claims particularly affect the livelihood of hundreds, if not thousands in the hospitality industry which have suffered business term insurer has led to

interruption through no fault of their own or as an act of god.

While it appears that all insurers, except one, OUTsurance, feel that there is strength in numbers to resist paying out on BI claims, the industries own association FSCA – Finan-cial Sector Conduct Authority - have made it clear to members that the National Lockdown is not an excuse not to pay legitimate claimants. This has further been amplified by the court judgement in the Café Chameleon CC v Guardrisk case where the court found in favour of the plaintive, instructing Guardrisk to make good on its policy

for which it had received regular premiums. Despite this it now appears that Santam is pursuing the same non-payment ethic of BI claims, which as the country's largest short a mobilisation of the hundreds of affected business owners to form a class action against the insurance giant and others with the same

(im)morality. Durban Law Firm RMB Attorneys who have taken on the mammoth task of fight the five main insurers, has confirmed that they are currently representing approx. 300 claimants on a contingency basis against insurance giants that include Santam, Old Mutual, Hollard, Bryte and Guardrisk.

They also confirmed that they are currently in discussions with other institutions that represent another 200 claimants to combine their legal efforts against the insurers into one massive class action suit.

RMB's principal Ryan Botisis, added that the attitude and stance of the insurers is totally unsympathetic and unconscionable to

the needs of their customers that have for years supported them unconditionally. "Now that their clients need their cover, the insures are doing everything in their power to renege on their obligations" Our mandated clients range from fast food franchises, luxury game lodges to big restaurant and hotel groups, all who have seen their insurer let them down diabolically in their time of need" he added Seems that the

analogy umbrella applies equally to insurers as well as to banks, despite their hackneyed platitudes of ethical business spouting from their websites.

Update: As of 28 July, Santam appears to have softened its position and is now making 'qual-ified' payments of up to 70% of the claim of some of their clients BI insurance. Ed.

Safe water at the turn of a tap

THE Rosa-TM-15 water treatment unit is a self-contained, full-cycle water processing plant with pre-cleaning and deep modules, cleaning a chemical flushing module, a purified water tank, a disinfection unit and an automatic pumping unit for supplying up to 30 m3/ day of potable water to the consumer, depending upon input water quality. It is sufficient to cover all the water needs of 150 people and enough for drinking and cooking needs of 6 000 people.

The comprehensive design comprises: - pump for source

water intake, - a pre-treatment module that allows



A STORY TO BE TOLD

Dorothy tried to settle her mind as she sat at her desk, looking out across her garden. She turned to her phone and dialled Anne, her publisist. The voice on the other side always made her smile and she poured her feelings of anxiety out. Anne was the type of person who did not rattle easily and quickly assured her that she had lined up someone to assist them with the production of her book. But Anne sensed the nervousness in Dorothy's voice. She also understood where it was coming from and how important this project was to Dorothy. Especially knowing what was at the heart of it, an ode to her late farther.

Dorothy had taken over three years to write the book with a few special trips back to the place of its origin. One special trip was with a close friend who photographed their travels in and around Lebanon. Capturing moments that spoke deep to her heart. Moments she layed out across the pages with her words and Roy's photographs.

Now it was time for Dorothy to hand over the control to someone she had never met. Who was this person? Anne felt she was loosing Dorothy and said, "lets go meet him! In fact he is insisting we go meet him tomorrow!

Anne chuckled to herself seeing how nervous Dorothy was. She had grown used to holding her hand through each and every process of the publishing journey. Dorothy was a first time author and what she had written was a masterpiece of menus described in such a way that took the reader on a taste adventure. Not just down the road to the

a place so different and vibrant that only the best printer would do. She knew Simon would be the right person for the job.

As Dorothy climbed out the car she was welcomed by his huge smile and his arms seemed to wrap around her like a warm blanket. But there was something different about him, and throughout the tour of the plant she could not put her finger on it. Soon an hour had gone by and her nervousness had turned into the biggest smile on her face. Dorothy was so excited she could hardly wait to get the artwork through to the printers so they could get started.

She had heard horror stories about projects just like hers going completely wrong. But Simon had put to rest all her fears. As the book went into production she was invited back to the plant to see the first sheets of paper come off the press. Pure delight was all she could say and came back home and told her husband all about it.

Two weeks later Anne was at her door with Simon and they handed Dorothy a parcel. She teared up knowing what was inside. Her hands began to shake, her heart began to thump in her chest as she unwrapped the package. From the wrapping paper her book emerged in all its cover to cover glory and that's when she figured out what Simon was all about. He was telling her a story the whole time. Her very own story about herself and what she had accomplished.

Sometimes a story goes further than trying to sell facts.

cleaning water from most natural and anthropogenic pollution with a coarse filter, or pre-filter (removing of coarsely dispersed pollution), sorption filters, a fine filter;

- deep purification module, which provides, if necessary, correction of the salt composition of water, i.e. removal of excess salt content, reduction of water hardness, etc.; - chemical flushing module - provides peri-

odic (once every 3-4

months) flushing of the

deep purification mod-

ule; a chemical flushing module of one Rosa unit can be applied for flushing of several units as it is mobile and can be used by a single service operator, which reduces costs when operating an integrated water supply network;a 1 000 litre capacity tank for purified water with an automatic pumping unit and a disinfection system. A combined disinfection system - a combination of UV irradiation and a chlorine-containing

reagent - provides a reliable protection of water from pathogenic microorganisms. The automatic supply and control system delivers 3 m3/h ensuring a safe water supply to the consumer at the turn of a tap. purification The capacity of Rosa-TM-15 where iron compounds, suspended solids or dissolved organic matter is present is up to 30 m3/ day. Where softening and partial desalination is required, reduced

struction / modernizaoutput of 15 m3/day is equivalent to the daily tion of existing water needs of approximately treatment plants. 75-150 people. Units, which occupy operates on a 5,5 kW a space of just 3.52 x power supply functions unattended requiring 2.45 m can be located in an existing or preno continuous presence fabricated building, or of maintenance staff. can be containerized Applications or made mobile allowbe found in social facilities, rural schools, ing for the comprehensive treatment of any hospitals and clinics, raw water supply to and any facility remote from traditional mains potable standards. The plant may be supply such as hotels

The plant which

and game lodges or

separate commercial

and industrial facilities.

can

used both as a system and as separate modules in case of recon-



This story was written by your local PRINT EXPERT

want to tell your story!"

Christian Jaggers SALES "story" REPRESENTATIVE **CONTACT DETAILS** christian@shumanirsa.co.za 083 383 8830 / 021 951 6391



Multipurpose mobile integrated water treatment module – **UMKWA-1**

UMKWA-1

Low cost solution for one of the major challenges facing Africa

UMKWA-1 is a mobile unit ready to produce clean water*:

From any water source
Anytime
Using any vehicle and power source
24 000 litres per day

*According to sanitary standards and hygienic requirements

Distinct Advantages





How Solution Works

- 1. Mechanical purification
- 2. Aeration
- 3. Ultrafiltration
- 4. Inhibiting action
- 5. Low-pressure reverse osmosis
- 6. UV disinfection
- 7. Mineralization

Specifi	cations
Weigh (without vehicle)	355 kg
Dimensions	5,4m x 2,3m x 2,4m
Capacity	1 ton of water per hour
Continuous operation	48 hours

Meets WHO and

and local

requirements

other international

Sustainable

operation

facility

Operates in

to +45°C)

severe weather

conditions (up

Low cost

solution

0

The installation capacity covers clean water demand for:

- **120 people /** for all household and personal needs per day (200 liters)
- **5 000 people /** for drinking and cooking needs per day (5 liters)



Rosa-TM-15 water treatment unit

A full-cycle ready-made water supply system for a separate object



Rosa-TM-15 creates a full-fledged water supply system combining the intake, purification, disinfection and supply of high-quality drinking water to the consumer

- Pump for source water intake, for example, from a reservoir or open water source
- A pre-treatment module that allows cleaning water from most natural and anthropogenic pollution with a coarse filter or pre-filter, sorption filters and a fine filter
- Deep purification module, which provides, correction of the salt composition of water
- Chemical flushing module provides periodic (once every 3-4 months) flushing

Specifications

Output	15-30 m ³ /day depending composition of feedwate for briny water (3-5 g/l s	r, 15 m³/day
The capacity of the tank for treated water accumulation and supply to the consumer	1000 I	
The flow rate of the pumping facility for water supply to the consumer	3 m³/hour	
Room size	3.52 x 2.45 m	1
Installed capacity	5.5 kW	A





ROSATOM

Rosatom Central and Southern Africa 7th Floor Sandton City Office Tower, Sandton **T:** +27 11 784 2554 **W:** rosatomafrica.com/en/ | **E:** info@rosatom.co.za

Service agreements reduce costs and ensure safety compliance.

"Overhead gantries, cranes, hoists and related lifting equipment components while often critical components of manufacturing and process facilities are also subject to stringent occupational and safety regulations in South Africa, making the maintenance of the equipment a critical activity. The most efficient and cost-effective way to tackle the associated financial implications and legal compliance is through a service agreement" says Emil Berning, Managing Director of Konecranes SA, a leader in the supply of advanced lifting equipment in South Africa.

"The key working components in crane management required for critical functions need to be monitored for performance, wear and tear and safety", added Berning "At Konecranes we believe that our service agreements offer our customers peace of mind and distinct cost efficiencies while reducing downtime".

The major benefit of a service agreement for customers is that maintenance, load testing and inspection is scheduled which ensures that all your lifting equipment is serviced regularly and repairs undertaken by qualified Konecranes technicians. It is crucial that all lifting equipment and components remain technically and legally operational. Better asset operational budgeting is achieved as a result of the good predictive maintenance practices. "The second important benefit is that the customer knows there is a fixed service price for a certain period of time" Berning said.

The CARE Preventive Maintenance program from Konecranes is the foundation of Lifecycle Care in Real Time. It has been designed to improve equipment safety and productivity through the systematic application of preventive maintenance inspections, compliance inspections where applicable, routine maintenance, and TRUCONNECT® Remote Monitoring.

Berning said "With industries moving more and more into the digitisation and paperless era, a further advantage of our service agreements is that it gives our customers realtime monitoring of the state of their lifting equipment via TRUCONNECT and our specialised customer web portal yourKonecranes. Our online portal yourKonecranes give customers access to their records of equipment performance, operator performance, machinery and spares spend analysis, service requests and records, safety data, all of which assist the customer to manage their assets optimally. Giving complete transparency between Konecranes and the client, the web portal enables all the relevant personnel to be on the same page at any given time".

Konecranes will tailor a service agreement to align it with the customer's operations. Consideration is given to factors such as age of equipment, usage, operating environment, duty class, service history, manufacturer's recommendations and statutory requirements when the service agreement is compiled.

"Above all else, safety is our top priority at Konecranes. This can only be achieved by having a well-managed asset maintenance programme that delivers machinery that is

Benefits of CARE Preventative Maintenance Programme

A key focus of the CARE Preventative Maintenance Programme is to ensure safety is enhanced and production risks are recorded. The programme is tailored to the customer's operations, taking into account the equipment, its usage, operating environment, duty class, service history, manufacturers recommendations and statutory requirements.

The following benefits are also achieved:

- Can reduce downtime and increase reliability
- Safety and production risks are documented and recommendations for corrective actions are provided
- Recommendations for improving the safety, productivity, application or useful life of the asset are provided
- Where permissible by regulation, can include frequent and periodic inspections to satisfy regulatory requirements and help you stay compliant
- Can contribute to maintenance planning and decision making with inspection and maintenance information available on yourKONECRANES.com, at any time on any device
- Operating data from TRUCONNECT Remote Monitoring provides insights into crane usage

Further information is available from: Jan Nel, Service Sales Manager - ServiceMe.za@konecranes.com



always safety and performance compliant" Berning concluded.



We love cranes - even ones we didn't make.

konecranes.co.za | +27 (0)11 898 3500

Do you have the right service provider?

At Konecranes, we understand that a crane is only a part of your process. We've learned this by working closely with our customers to help make their processes more efficient - with just the right hardware, software, service and expertise.

We SERVICE ALL MAKES OF CRANES

with the right approach to inspections and preventive maintenance. OUR SERVICE **PROGRAMS TAKE INTO ACCOUNT** EXACTLY WHAT LEVEL OF SERVICE YOU **REALLY NEED.**

PBT rockets on tech demand

CAPE TOWN-based data services business PBT Group has bucked the dour economic trend to produce a stunning set of numbers for the year to end March.

Last month PBT reported a 14% growth in revenue to R672.5 million and a 35% gain in operating profit to R65.1 million.

The group reported continued demand for services at good profitability in South Africa which accounts for 88% of revenues.

In Australia there was subdued profitability and limited growth, but PBT continued to explore additional avenues for revenue growth.

In Europe (mainly the UK, Ireland and the Netherlands), PBT reported good profitability prospects in areas designated as key expansion areas.

Recently appointed PBT CEO Elizna Read said the group's business model had been "slightly adjusted" to accommodate and complement the range of new technology stacks that were related to the group's data specialisation. "Although data remains our focus, we have initiated a series of accelerators applicable to most of these technology stacks to enhance our services."

She reckoned this was another strategy which would enable PBT to position itself as a differentiator in the market of data specialisation.

Read explained the acceleration approach was taken for various reasons - but mainly in consideration of new technology releases, faster throughput on delivery, as well as cost-efficiencies to clients. "Another important reason is that, although data explosion has continued, numerous clients not only have to absorb the new data platforms,

but many of them are also in a process of migration – whether on premise, cloud, or a hybrid thereof."

Read said the business demand for access to data was increasing rapidly and new techniques and approaches were inevitable. "PBT's accelerators

are being developed to perform ingestion from source to target, code generation and mapping, as well as cater for a data quality framework and functionality to supplement the migration process." She stressed such

accelerators were easy to deploy and enabled the data specialists to rather focus on data than the underlying technology.

Read noted that the past financial year proved again that the value of artificial intelligence (AI) and most analytical models could only be enabled through proper data engineering – which is PBT's core business.

"The accelerators supplement our services to differentiate ourselves from our competitors, whilst not having to sacrifice our

technology agnostic approach. We are generally well positioned to meet the increasing demands."

Looking ahead to the new financial year, PBT remains focused on securing new clients and contracts as well as employing additional consultants.

While the capitallight business (with a strong balance sheet) is focusing on organic expansion, strategic acquisitive expansion will also be considered. PBT last made an acquisition in 2012.

In terms of organic growth, most of PBT's clients are considered stock exchange listed A-grade clients with low counterparty risk; PBT's investment presentation discloses that the group's top 10 clients make up around 52% of total revenues.

Remote monitoring takes the hassle out of load shedding



WITH

load-shedding lar expected to be a reality for the foreseeable future Cummins has put several measures in place to ensure its customers have access to its latest technology and solutions.

regu-

These include a dedicated web page and two 24/7 telephone lines to allow customers to contact Cummins at any time of day or night, for customer and aftermarket service, or technical support, back-up, and expert advice. In addition, the Cummins Regional Distribution Centre (RDC) in Johannesburg and its branches in Cape Town, Durban, Kathu and Middleburg maintains a full stockholding of gensets and critical spares.

"The main aim is to limit the impact of load shedding for our customers, and to ensure

they have minimal downtime," Cummins Power Generation Sales Manager Zivai Zvinokona explains. An innovative solution in this regard is the PowerCommand-Cloud® 550 remote monitoring system, which is ideal for largescale customers such as

financial institutions that operate multiple gensets. Here monitoring each genset individually is not practical or cost-effective. Instead, PowerCommand-Cloud® 550 provides a convenient means of remotely monitoring gensets, transfer switches, and output controls. Users can access the system from any computer Microsoft

using a

additional

Zvinokona

required.

lights that Cummins has a full range of alternative power solutions on offer. Its technology particularly suited is dealing with load to shedding due to features such as full load acceptance for critical equipment.

In addition, its energy-efficient engines not only comply with emisinternational sion standards, but also have a high fuel tolerance level, which makes them ideal for arduous African operating conditions. In terms of automatic start-up, Cummins gensets claim one of the best response times on the market.

The key differentiator of Cummins is that it is able to supply a small 17 kVA genset for residential or commercial use, all the way to a 3 750 kVA unit for mining, data centre, and hospital applications.

An elastic sealant for wood flooring

African smartphone market

suffers 17.8% decline due

to Covid-19

FLOORING contractors often need an elastic sealant that allows for some movement capability in wood flooring. Den Braven's Woodflex, a silicone and solvent-free elastic sealant offers the ideal solution. It can be used on all typical woods to seal and fill gaps, cracks and joints where some movement capability (up to 8%) is required.

Some of the flooring projects where this sealant can be used include parquet, cork, laminate, bamboo, wooden flooring and

skirtings. The joining and sealing can blend in perfectly with the flooring system thanks to the six colours available in the range.

The sealant has excellent adhesion qualities. is fast drying, sandable and paintable once fully cured.

It is packaged in transparent cartridges, making matching and colour identification very simple.

For more information, contact Den Braven on Tel: +27 (21) 552 9674 or via www.denbraven. co.za.

5G network launched in Bloem and PE

Silverlight-enabled

web browser, with no

software

high-

- MTN South Africa went live on 30 June 2020 with a commercial 5G offering, using Ericsson products in Bloemfontein
- and Port Elizabeth. The launch is first of the mobile operator's 22 operations and is a continuation

the cities of Bloemfontein and Port Elizabeth.

The MTN 5G launch is central to the mobile operator's commitment towards accelerating Africa's growth plans. The launch confirmed Ericsson's ability as a Core and

previously MTN upgraded to Evolved Packet Core (EPC) by Ericsson which enabled MTN to launch 5G services based on new radio (NR) non-standalone (NSA) while paving the way for a smooth evolution into NR Standalone and 5G Core (5GC) in future Ericsson currently has 95 commercial 5G agreements and contracts with unique operators, of which 55 are publicly announced 5G deals, including 43 live 5G networks on five continents.

INSIGHTS from International Data Corporation (IDC) reveal that the COVID-19 pandemic has led to one of the largest quarterly dips in Africa's smartphone market since 2015. The global technology

saw shipments decline 17.8% quarter on quarter (QoQ) in Q1 2020 to total 20.1 million units. The overall mobile phone market totaled 46.8 million units, down 20.5% QoQ, with feature phones account-571% share of

smartphone shipments in Q1 2020. The pandemic initially restricted the supply of shipments into the region in February as manufacturers in China closed their doors. Then in March, the situation worsened Huawei with respective shares of 18.8% and 11.1%.

Looking ahead, IDC expects Africa's smartphone market to decline 9.1% year on year in unit terms for 2020 as a whole. "A significant portion of mobile phone channels are closed in the region and economies have slowed down quite significantly during Q2 2020, which will lead to a weaker Q2 performance," says Ramazan Yavuz, a senior research manager at IDC. "While we expect to see a recovery in the second half of the year through normalization efforts undertaken by governments, the heavy impact of the pandemic on the economies will be felt on the overall 2020 smartphone market.'

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research and co	onsulting	ing for 57.1% share of
firm's latest W	orldwide	total units versus smart-
Mobile Phone	Tracker	phones at 42.9%.
shows that	Africa's	COVID-19 had a two-
smartphone	market	stage negative impact on

COVID-19 severely disrupted the industry in Q1 2020, while consumer demand also showed signs of a mild decline. In such an environment, consumers are moving towards more affordable entry-level and mid-range devices. Xiaomi benefited from this trend and was able to drive growth over the quarter while most of the other popular brands reported declines.

Taher Abdel-Hameed, a senior research analyst at IDC

as consumer demand was hit by local measures and lockdowns to combat the spread of the disease. The pandemic adversely impacted all African countries, particularly the continent's three major markets of South Africa, Nigeria, and Egypt, which suffered declines of 22.9%, 13.6%, and 6.3%, respectively. Transsion brands (Tecno, Infinix, and Itel) continued to lead the smartphone space in Q1 2020, with a combined unit share of 36.7%, followed by Samsung and

of the MoU signed in 2019 between Ericsson and MTN at AfricaCom.

MTN South Africa announced the availability of its 5G comfuture-proof 5G netmercial offering using Ericsson products in work.

Radio Access Network (RAN) infrastructure enabling the deployment of next-generation technology to deliver rich consumer experiences while building a robust,

We value your input

Only through your input can we continue to improve.

Comments - Suggestions - What would you like to hear about

editor@cbn.co.za

Can we now say goodbye to junk email?

IT has taken six years, but at last a new law to control those who would access our personal information permission, without is operational. The new measures hope to stop the invasions of our privacy that have accompanied our entry into the digital world. One must wonder why it took so long for the legislation to reach the lawmakers. It came before Parliament in 2013, and took another seven years for the civil service to get its act together to carry out Parliament's wishes.

But we should be grateful that the much anticipated -- and some say deeply-needed --Protection of Personal Information Act, 2013 (POPIA), which, incidentally, gives effect to our constitutional right to privacy, is now fully enacted.

Although the original Bill was passed seven years ago, enabling the appointment of an Information Regulator, it is not clear if it was actually appointed or will now be appointed. Despite its name, The Regulator is not one person but a committee with sub-committees, some committee members being part time, and others full time employees who may be civil servants or co-opted (and paid) members of the public.

What is clear is that there are now legal conditions on the processing of special personal information; there is (or will be soon) a Code of Conduct for dealing with complaints; there are rules governing junk mail ("unsolicited electronic communication" is the polite name); and general rules for the direct marketing industry.

POPIA also transfers the functions of the Promotion of Access to Information Act from the South African Human Rights Commission to the new Information Regulator.

What does this mean for the private sector? Well, theoretically, all organizations must be POPIA compliant by 1 July 2021, but no one yet knows exactly what that would mean. The Act is typically long on the subject, requiring a fully-trained legal mind to understand it. We have to hope a simple guide will be provided by the Information Regulator.

Meanwhile, companies could do well to read POPIA closely. They should consider appointing a company information officer, explore the implications for company contracts; draft the right policies, and establish controls and processes to ensure the compliance framework is effective.

In sum, access to your private information will now be guarded by a new set of civil servants with new regulatory powers to prevent it being used by people trying to sell you stuff.

Organs of State, on the other hand, are still able to look over your shoulder as you WhatsApp, Email, SMS your friends or send pictures to whomever and of whatever you chose - as they always have.

The private sector businesses, who pay taxes to pay the salaries of the new Information Regulator staff, will have to employ more people to ensure that they are obeying a new law and avoiding a jail term - unless of course they wish to avoid such unpleasantness and cough up a fine not exceeding R10 million (which may be increased in line with future inflation).

If they take the fine route, they will be happy to know that paying it will not provide an automatic criminal record.

Comment from Geoff Jacobs, President of the Cape Chamber of Commerce & Industry.

Fire-fighter training vehicle supplied

A Serco Protec Steel Frostliner trailer provides the backbone for a mobile fire-fighting training gallery now in use at SASOL's headquarters in Johannesburg.

Serco built the trailer for Dräger SA who fitted it out based on specs provided by their client -it is believed to be the only one of its kind in South Africa.

Dräger, a German company with its international headquarters in Lubeck and branches throughout the world, makes breathing and protection equipment, gas detection and analysis systems, and non-invasive patient monitoring technologies. Customers include hospitals,

fire departments and diving companies, and among the products produced are ventilators and personal protective equipment (PPE), the sales of which have soared since the outbreak of COVID-19.

Regional Sales Manager at Dräger SA, Willem Liebenberg, said it was the first time his company had done business with Serco. "We became aware of the company due to the large numbers of vehicles seen around with their branding on. The fact that they are in Johannesburg made it easy for us in terms of the logistics involved and we chose them for

"We were pleased

the project.

with the trailer and really enjoyed the company's excellent service and willingness to accommodate our needs," said Liebenberg. The trailer needed

to be partitioned to allow for a variety of sections, including a training maize complete with thermal cameras. "Serco provided us

with a trailer exactly according to our specs." Dräger then got to

work to convert the trailer's interior into a fire-fighting training gallery which comprises three main sections:

A maze area

fitted with thermal cameras to view the trainee firefighters in action as well as a smoke machine to simulate a lack of visibility during drills, and a light and sound system to create an actual fire and the sound of victims in distress.

- A control room with a TV screen to view the trainees in the maze and help ensure a high level of safety.
- A cleanroom featuring a water system to clean the equipment after use.

A special feature is a hatch on the roof through which trainees enter the maze, simulating a confined space



Pictured in front of the new Dräger SA firefighting vehicle from left are Graeme Matthews of Dräger SA, Charl Coetzee (back) and in front Rajen Reddy of Serco with Willem Liebenberg and Pieter Hugo also of Dräger SA.

fire-fighters to master

entry point allowing real emergencies. The roof was reinforced to skills they will need in accommodate several

firefighters needing to be up there at the same time.

Hand sanitiser poses new risk to retailers

RETAILERS could potentially face a new surge of class actions and personal injury claims for negligence regarding the use of harmful products. This follows the news that some South Africans have reported developing a rash after exposure to hand sanitiser at store dispensed entrances.

This is according to Bonginkosi Ntuli, Claims Specialist: Professional Indemnity

alcohol based. Retailers had to be compliant by order of law, and may not have had enough time to conduct thorough testing. Scientific study will likely show that in any control group, a percentage of people could expect adverse reactions to any product. The question is whether stores can be held legally accountable if, for example, one out of every 10 000 people has a non-lethal reaction. Should the risk of averting Covid-19 enjoy priority over general consumer safety? "It will be interesting to see whether the court ultimately believes that the Consumer Protection Act applies in these cases, as no money was exchanged for goods purchased as the sanitiser was applied as a pre-requisite to entering the store."

at risk of losing substantial amounts of money if they are not adequately insured against personal injury claims. "For a claimant to successfully sue a retailer, they would be required to prove that the harm caused was a direct or indirect result of the harmful product supplied by the store. While the court's judgement may ultimately be in favour of the retailer, the legal fees that one incurs while defending such claims, can have a significant impact on a business." Jonathan Kaiser, Claims Specialist: Professional Indemnity & Liability Claims at SHA points out that the likelihood of being sued by a consumer is high, even if most cases are frivolous. "SHA's own statistics show that the intimated values for personal injury claims

businesses

of claims has also increased exponentially. Adding to that, the cost of adequate legal defence has gone up by between 8% and 10% annually in recent years. Considering that liability cases routinely take three to five years to reach settlement, the inflationary effect of legal fees will definitely be felt.'

In light of this, Kaiser says that retailers must take the necessary precautions to potential manage liability risks related to their use of hand sanitisers. "Retailers can start by putting up large visible disclaimers warning customers about any potential adverse effects of hand sanitisers - specifically indemnifying themselves from liability. They should further stipulate that while customers are required to be sanitised, they may decline to do so if they have their own sanitiser, and apply it before entry



under supervision of the store. Retailers must also ensure

use on consumers are a "reasonable retailer" approved as medically would, and apply the safe. In short, retailers necessary

precau-

& Liability Claims at SHA Specialist Underwriters, who says that even though it is debatable whether retailers will be held legally accountable for allergic reactions to hand sanitisers, retailers should act cautiously and ensure they have adequate cover in place.

"Government issued a directive requiring all stores to comply by ensuring that they have hand sanitisers available, with the only requirement being that they should be 70%

Nevertheless, even if retailers are not held against legally accountable for have grown by at least injury or damages in 56% in a space of two this regard, they are years. The frequency

that the products they should act in a way that tions.

SANS invites technical membership

THE South African Bureau of Standards (SABS) is the National Standards Body of South Africa that is responsible for the development, maintenance and promotion of South African National Standards (SANS) as mandated by the Standards Act No.8 of 2008.

SABS is also responsible for the promotion of quality in connection with commodities, products and services; and render conformity assessment services and assist in matters connected therewith. Stakeholders interested in becoming members of SABS technical committees can register their interest to participate on www.sabs.co.za or email info@sabs.co.za

SABS currently has a collection of 7 400 SANS and continues to develop more standards. SANS are available for purchase via the SABS webstore.

New hydraulic pumps deliver 700 bar pressure

and-release actuation to the cycle wrench until final torque is achieved. significantly improving completion speed in every application."

Th E-pulse range features a new interactive pendant that delivers visual and tactile feedback, as well as programming and diagnostic status to the operator. The IP 67-rated pendant, with protection against the ingress of dust and water, can be stored in the handle of the pump and is secured via a magnet. Operation, programming and diagnostics status are communicated to the operator through yellow, green, and red light emitting diodes (LED) as well as vibration pulses. Fault-codes indicate any issues related to voltage, temperature

kW direct-drive motor, has a six-piston block design that provides even-flow and smooth operation of connected tools. Various models are available from BMG, with a choice of five valves -3/2 jog, 4/3jog, 3/2 dump-and-hold, 3/2 dump and 4/2 torque wrench. Flow at rated pressure is 32 in 3/minute, with a maximum operating pressure of 700 bar.

jetting hose is half the

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Pumps SA, a South

African design, manu-

facture, supply and

maintenance specialist

in high-pressure jetting

equipment, has part-

nered with Enz Technik

AG to supply Swiss-

manufactured nozzle

solutions. "Enz has

been servicing the jet-

ting market since 1985

and the company's high-

tech products are unsur-

passed when it comes to

workmanship quality

and effectiveness," says

Sebastian Werner, MD

of Werner Pumps. "We

stock a comprehensive

range of Enz nozzles

that are compatible with

our 100% locally manu-

factured jetting and

vacuuming equipment,

as well as other models

available in the South

supported rotor, which produces very

fast vibrations and

African market.'

include:

battle won.

Additional features include a 24 V DC power regulator, built-in thermal protection, a 6 m pendant cord on the torque wrench pump and a 3 m pendant cord on the other four pumps. All models in this range are fitted with a convenient cord management system.

For further information: Chantelle Janse van Rensburg, Enerpac Product Manager -BMG Tel: +27 Ĭ1 620 1606 Email: chantellej@ bmgworld.net



Turbopuls Spinning and Grenade Bomb nozzles.

pulsating jets. The resulting pulsations are strong enough to disintegrate deposits up to 100 mm thick.

Nozzles for every high-

- Bulldog: The Enz Golden Jet Bulldog Rotating Nozzle has been designed for operation with recycling water and fresh water. The cleverly built sliding bearing allows the use of every kind of recycled water. An integrated oil-free braking system results in a low wear and tear operation and in controlled numbers of rotation, ensuring efficient and economic pipe-cleaning. The bore of the nozzle insert determines the admissible size of the
- dirt particles, up to a Some of the specialist maximum Ø 1 mm. Enz products available Pointed nozzles: from Werner Pumps Concentrated powerful advance is obtained by means of four front jet nozzles. Rotopuls: The Enz Golden Jet rotating The sharp edges cut, nozzle is provided break and penetrate through every kind with an eccentrically

nozzles from art. 60.050 onward are provided with ceramic inserts. Because of this, the efficiency is considerably higher compared with those nozzles with drilled holes and the service life is several times longer. Applications include penetrating of completely clogged pipes, opening of interlaced roots and opening of frozen pipelines.

Grenade bomb: This Enz Golden Jet nozzle is made of wear-resistant hardened steel. The "grenade" and the "bomb" are joined in the same nozzles. Two different jet angles of 10° and 30° perform together, ensuring strong traction and effective cleaning. Applications include removal of loose rubble, stone, gravel and soft deposits

For more information or to download the complete nozzles catalogue, visit the Werner Pumps website.

Local manufacture of mobile pumps

of blockage. Made

of wear-resistant,

hardened steel, all

INTEGRATED Pump Rental's range of Sykes pumps in mobile configuration has seen enthusiastic take-up in markets varying from large open pit mines to construction sites. So much so that Sykes product specialist at Integrated Pump Rental, Henru Strydom, says that the company has embarked on the local manufac-



The Sykes CP units weigh only about 1,5 t on a road trailer, which allows easy mobility on-road and off-road.

Recently-launched portable hydraulic electric Enerpac E-pulse pumps.

"OUR new lightweight Enerpac pumps are able to provide power to various 700 bar hydraulic cylinders, nut cutters and torque wrenches quickly and efficiently. E-Pulse pumps are able to operate hydraulic tools as fast as pumps with motors larger than 0.75 kW. These pumps are currently the only hydraulic torque wrench pumps on the market with intelligent auto-cycle functionality and are the only pumps available that allow an operator to vary the speed between 25% and 100% of full speed," so says Chantelle Janse

van Rensburg, Enerpac Product Manager -BMG. "E-Pulse hydraulic electric pumps have an adjustable speed-dial which allows the operator to adjust the speed to suit the specific task, ensuring precise control of large and small hydraulic cylinders and nut cutters, as well as quick and safe completion of work. "For bolting appli-

cations, the operator can set the pressure and operate the torque wrench pump in either 'manual' or 'auto-cycle' mode. The intelligent auto-cycle







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ture of these units.

"Mobile pumps can deliver real economy through their ability to be moved where and when required," says Strydom. 'With their own wheelbase, it means that no infrastructure needs to be built before they can start working. They can also be moved quickly in an emergency."

This applies not only to small units on roadworthy trailers, but to large dewatering pumps for deep, open pit mines. In a recent contract, Integrated Pump Rental manufactured locally

a mobile version of its extra-high head Sykes XH150 pump for a diamond mine in the mountains of Lesotho.

"This model can dewater a mine's pit to a depth of 250 metres," he said. "The pump can run at full load for up to 28 hours on the tank of diesel that is included on the trailer configuration."

Next in the range are high head (HH) pumps, which can pump to a height of between 70 to 150 metres, while the medium head (MH) pumps can reach heads of between 50 to 90 metres.

The contractors' package (CP) range comprises the smaller units which can be pulled by a bakkie or 4x4 vehicles. These are also licenced for travelling on public roads.

The robust, autopriming Sykes pump range has features that protect against overheating or low oil levels, optimising uptime and ensuring low maintenance requirements. Internal components including impellers, wear plates and shafts are supplied in stainless steel as standard for high resistance against acids.

WRT can improve wear life by up to 50%

WEIR Minerals' new wear reduction technology (WRT) for impellers and throatbushes is an inexpensive upgrade compatible with all Warman AH, M and L series slurry pumps for the mining industry.

"The hydraulic refinements lower the pump's lifetime consumption and reduce the Net Positive Suction Head "

The company says the retrofittable WRT can improve wear life by up to 50% and allows the use of the hydraulically efficient four-vane design to reduce operating costs. The Warman WRT technology follows many years' research into the wear patterns and hydraulic

Warman AH pump's impeller and throatbush. Along with a vanelet on the back shroud, replacing the five-vane impeller with a modern four-vaned design improves fluid guidance through the performance of the pump.

The hydraulic refinements lower the pump's lifetime consumption and reduce the Net Positive Suction Head (NPSHr) requirements of the pump, compensating for process or feed changes which have sometimes left a Warman AH pump overtaxed.

technology This is already in use in a goldmine in Western Australia, where the installation of the technology has more than doubled impeller wear life in an application involving abrasive, highly viscous slurry and reduced total ownership costs by AU\$27,000 per year.

Stainless steel pump solution for Namibian mine



A custom engineered stainless steel Sykes pump set produced by Integrate Pump Rental.

ISO 9001 - 2015 certification achieved



Vivian Allies.

UNYAZI, a local South African entity, embarked on achieving ISO 9001 -2015 certification in November 2019. Unyazi is the local authorized business partner for Emerson Products and Services, focused on Plant Lifecycle Service care.

The company set a target of 6 months to achieve accreditation to the ISO 9001-2015 standard and accreditation was achieved on 01 July 2020. The scope of accreditation covers Sales, Servicing and Repair of Valves, Actuators and related equipment.

Unyazi Director Vivian Allies commented "The challenges imposed by Covid-19 restrictions, demanded high efforts and dedication by the Unyazi teams. The required controls and checks were soon in place and it was decided to achieve accreditation via the South African Bureau of standards. Stage one of the audit was conducted in March 2020, with no issues being noted and the Stage 2

the end of June 2020. The two-day audit was successful, and no nonconformities were noted. We are very proud of our teams for having achieved this despite difficult circumstances." Unyazi Sales and Services (Pty) Ltd, was established in 2015 and acquired by

audit commenced at

Lesedi Nuclear Services in September 2019. Unyazi provides experienced and technically related services to the South African Industrial, Oil and Gas, Power and Utility, Mining, Marine as well as agriculture and construction industries, by offering a full range of industrial project and maintenance related services, from start to finish.

For more information visit: https://unyaziss. co.za/

HARSH coastal conditions at a mining operation in Namibia demanded a dewatering solution beyond the ordinary.

Its remote location, combined with its highly corrosive environment, meant that the mine needed its equipment to be wear-resistant and require minimal maintenance. According to Steve du Toit, rental development manager at Integrated Pump Rental, its solution in this case was enhanced by a customised design.

"Our Sykes diesel driven pumps come standard with stainless steel internal wearparts, but for this particular application we included a stainless steel volute - for a fully stainless steel pump," says du Toit. "In addition, we constructed the entire pump set out of grade 316 stainless steel at our facility in Jet Park."

The company designs and engineers its pump sets in-house according to customer's specifications, and in line with mining safety standards. For this project, therefore, stainless steel was also used for the integrated fuel tank, the drop discharge pipework, the single-point lifting frame and the

engine mountings. With its efficient working practices and established supply chain, the pump set was supplied to the customer within five days of the order being received. The work and handover were carried out during South Africa's hard lockdown in the early days of the Covid-19 pandemic. Integrated Pump Rental was active during this period as an essential service provider to the mining sector.

The Sykes CP150 pump set boasts a maximum flow of up to 172 litres per second, pumping heads of up to 60 metres, with a solids handling capability of 77 mm. It is driven by an 83 kW Perkins diesel engine, a popular model in the mining market which is easy to maintain.



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with a valve seat design. Additionally, the FF series is low maintenance, long lasting and a low-cost system that gives improved system safety.

The flow switch FF

series consists of housing sizes for nominal pipe widths from DN8 to DN50 and freely selectable switching values from 0.41 l/m. The swift reaction times of less than 100

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The FF series of flow switches come in various housing

sizes for high-pressure cleaning technology, industrial washing machines and car washes, as well as refrigeration technology and hydraulic applications, in fact suitable for applications within any sector where water is pro-cessed" Jan Grobler, Managing Director of GHM Messtechnik South Africa said.

Grobler added "The simplistic design of the piston valve seat makes it practically maintenance free in all applications.

In addition to their fast and precise measurement, the FF series flow switch is a long lasting and low-cost switch making it a preferred choice for applications where flow measurement is required".

Simple mechanical operating principals enhances durability.

The volume raises a piston (fitted with a magnet) out from a valve seat against a spring force.

ommended maximum

With the spring-

supported stabiliza-

tion of the piston and

length of the housing,

use is possible in all installation positions.

The flow switch FF

flow through the hous-

ing where the verti-

cal functional design

is highly resistant to

horizontal

volume.

enables

The stroke causes a magnetic field changes that actuates a hermetically isolated Reed switch and generates an electrical signal. The vertical positioning of the Reed switch adjusted at the factory enables recognition of flow rates from approx 2% to 60% of the rec-

the short installation application.

> Further information is available from: Jan Grobler, Managing Director, Messtechnik South Africa. Tel: 011 902 0158

email: info@ghm-sa. co.za



This results in the filtration efficiency of the overall system being supported giving additional benefits of safety and functional reliability throughout the

water contaminants. **Groove flow control** technology improves pump performance

The research article Study on improvement of hydraulic performance and internal flow pattern of the axial flow pump by groove flow control technology' has been published in Elsevier journal Renewable Energy.

Abstract

WHEN an axial flow pump operates at small flow rates, rotating stall may occur, which seriously restricts the pump performance and poses a great threat to the safe and stable operation of the whole system. The present work proposed a new groove flow control technology for the axial flow pump and studied its

improvement effect and mechanism under stall conditions by numerical simulation. Results show that the groove flow control technology can significantly improve the hydraulic performance of the axial flow pump under stall conditions, with the pump head increment as high as 85.55% and the unstable region on the hydraulic performance curve was completely eliminated. In the inlet pipe region, it can effectively improve the bad flow state near the inlet of the impeller

by increasing the axial velocity component and decreasing the velocity circulation dramatically. In the impeller region, the flow separation on the blade surface was improved and the cross-passage vortexes were suppressed, and the reasons were explained by analysing the flow fields and pressure distributions in the representative grooves. In addition, compared with the diagonal groove (DG) scheme, the axial groove (AG) scheme showed better performance.

Access the complete article on Science Direct:

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Cobot - future-proofing SMEs



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MANY countries the EMEA region are likely to experience serious labour shortages over the coming decade, especially in relation to technical specialists. At the same time, product lifecycles are becoming shorter. Despite this, small and medium-sized enterprises (SMEs) might be reluctant to invest in additional automation due to the cost factor. However, collaborative robots (cobots) are easy to set up and offer a quick and cost-effective solution, like for example the Omron TM series of collaborative robots. They can increase the flexibility, quality and speed of production and enable companies to respond rapidly to changing market conditions.

But the question is, how will robots futureproof these enterprises?

Robots are not new to the industrial world and were first used in industrial manufacturing in the 1960s and since then, their number has increased inexorably. Some 500,000 to 600,000 new robot systems are now becoming operational throughout the world each year, although the increase is particularly noticeable in the Asian market, as reported in 'World Robotics 2019' by the International Federation of Robotics (IFR) and Fraunhofer IPA. If small and medium-sized production companies in the EMEA region want to keep up with constant economic growth internationally, they need to invest more in automation for cost reasons alone. Due to technical skills shortages, greater automation is needed to counteract this decline.

Cobots provide greater flexibility

Classical industrial robotics might not be the solution in all applications. Traditional production lines are designed for manufacturing large numbers of products. In today's world, product lifecycles are getting shorter for example, in the 1970s, the average product lifecycle of a vehicle was eight years. Today, car models often get their first modifications or facelifts after just two to three years. Production and automation must adapt to the shorter lifecycles of products, and cobots can help with this. Cobots were first introduced in 2008 and represent a rela-

introduced in 2008 and represent a relatively new category of industrial robots. In contrast to traditional robots, which must be shielded from the human workspace by a security fence, cobots were developed to work safely with people. Users also need less time and money to program an application with these "helper robots."

In addition, cobots can easily be moved from one location to another to work on different tasks, whereas conventional industrial robots have to stay in one location and can normally only be used for a specific task within the robot cell. Cobots therefore provide greater flexibility to the user.

The diverse tasks they can handle vary from simple pick-andplace applications for parts handling, sorting, and palletizing, right through to machine assembly, order picking, packaging, and testing. They can help to apply adhesive and sealants, assemble or disassemble parts, measure, test, check and take over screwing operations.

The result is seen in significant benefits for the employees, who no longer have to carry out monotonous, physically demanding or even dangerous work, but will receive support with precision work and can concentrate on their core abilities.

Cobots are userfriendly and versatile

Omron's TM series of cobots illustrate how versatile and straightforward cobots are in today's world. The different versions are suitable for practically any environment, such as the automotive, semiconductor, food, packaging, and cosmetics sectors. Due to the flowchart-based programming, an intuitive HMI user interface and simple, hand-guided teaching functions, almost previous knowlno edge of programming is required. Just like with a PowerPoint presentation, the user can assemble complete function blocks and fill the predefined attributes with the desired parameters. The cobots have options that include an integrated camera, vision and a lighting system which enable them to precisely handle and trace items.

Many core functions (such as pattern, barcode and colour recognition) enable detection, inspection, measurement and sorting applications to be implemented easily and, if necessary, adapted to other requirements. With the help of Omron's Landmark positioning recognition facility, the cobot knows where it is and can be aligned with another machine, for example, without much effort or recalibration. It can even move autonomously and work wherever it's needed, because cobots can be combined with Omron's LD series of mobile robots.

From needs analysis to support

Additional components (such as extra axes, grippers, force sensors, communication devices or screwdrivers) can be easily used by the cobots via plug-and-play system. Omron has set up a partner network that offers a range of suitable components. The company's automation experts also provide support with any queries about the use of cobots. This starts with the analysis of the production task and the environment; the selection of the appropriate cobots and grippers or additional components; and also includes risk analysis and assessment, commissioning, training and technical support. All of this makes it easier for SMEs to gain a foothold in the flexible manufacturing industry of the future.

Streamline supply chain to keep mines viable



Streamlining processes can save costs.

AS mining companies cut back in efforts to remain viable under Covid-19's demanding conditions, crushing and screening specialist B&E International proposes a bold new approach that streamlines mines' supply chains.

According to Ken Basson, director of plant and engineering at B&E International, mining suppliers and service providers need to be proactive in helping mines find sustainable solutions to the current challenges.

"Covid-19 will undoubtedly reduce demand for certain commodities, and, with geopolitical uncertainty, we are likely to see increased commodity price volatility," says Basson. "This is leading most mining companies – especially juniors – to try to strengthen their balance sheets."

To do this, there are inevitable cuts in capital expenditure and even operating expenditure. He says the time has come for mining suppliers to streamline the delivery of their services and products, and even to assume more of the day-to-day risk facing mining operations.

"At a time when mines are demanding even higher efficien-

cies and more plant uptime due to tough trading conditions, the post-Covid environment is expected to present a number of logistical and supply chain constraints," he says. "To cut through this double-whammy, suppliers need to be helping to consolidate supply chain networks. This is the only way of minimising procurement expenses while limiting process plant

spares being unavailable in time." A range of other imperatives also need to be addressed at the same time, he says. These include the growing demand for mines to support in-country job creation and local skills development, as well as local manufacturing and procure-This means ment. less reliance on costly expatriate skills, whose movement around Africa may in any event be restricted by Covid-

outages due to critical

related regulations. "To streamline the supply chain, B&E International is forming strategic partnerships with key suppliers, to integrate their respective service offerings with ours," he says. "This gives the mine the advantage of dealing with fewer supplier interfaces. We also take over the responsibility of ensuring that our partners – and their products – perform to expectation."

As one of the few companies in South Africa that both builds and operates its own equipment, B&E International is extending its level of vertical integration through this collaboration with strategic partners.

"To cut through this double-whammy, suppliers need to be helping to consolidate supply

chain networks..." "Not only do we

Not only do we design, manufacture and install complete processing plants across various commodity sectors, but we also operate and finance these facilities," says Basson. "This places us in a unique position to partner with mines to reduce their capex, opex and risk."

The company offers a build, own, operate and transfer (BOOT) model of plant procurement, ensuring a mining company of its planned throughput while also fixing the exact cost of that production, he says.

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Tips for improving distribution center staff morale

Little or No Cost Ideas from Prologistix can help improve the DC environment



EVERY company is interested in improving distribution center performance. (DC) Of course, currently, all the focus seems to be on technology, especially robotics of all kind.

However, technology improvement can involve significant investment – and often a long time before seeing the benefits from those expenditures.

Distribution managers should also look for simpler, low cost opportunities to drive performance gains.

One place to look is in improving morale. A happy workforce is a more productive workforce.

On a recent blog post, Prologistix, a warehouse staffing firm, offered series of practices that can boost staff morale in the DC at little or no cost. The list of do's and don't's are summarized below:

Do: Highlight great performance

Perhaps the best way to show workers they're appreciated from the top down. When managers highlight and even reward top-notch work - such as with public recognition or small rewards (even nonmonetary ones) and the like - that doesn't just help reinforce satisfaction among those workers. It also gives their colleagues something to strive for so that they can earn recognition. similar

they are less likely to be happy at work. For that reason, encourage workers to take full advantage of their break or lunch periods, and also push them to take at least a few days off every few months so that they are never feeling overly drained in their day-to-day

Do: Encourage a stronger community

work.

It just stands to reason that when your employees all mostly like each other and get along, they are more likely to work harder to ensure everyone is meeting their goals on an ongoing basis.

Consequently, it's wise to conduct teambuilding exercises and hold events that allow all your employees to come together not as co-workers, but as friends. Something as simple as a few annual events could help ensure everyone maintains strong ties.

Don't: Assume you know everything

One of the biggest sources of worker frustration in many situations is when they don't feel like the boss is listening to them, or is giving instructions that don't make much sense. Managers should be responsive to when workers say there may be certain issues with the tasks they've been given, because these are people who work all day every day at their specific jobs, and they may just know better what's feasible. - but that's not the only way. In fact, nearly 90% of respondents to the company's poll said that they would consider receiving a little more time off to be equivalent to getting a raise. For that reason,

if you can couple smaller occasional pay increases with more flexibility about scheduling or time off, you may be able to foster stronger employee morale.

Some good ideas for sure. Are these practices in place at your company?

Reprinted from Supply Chain Digest – visit www.scdigest.com

The right tools in trying supply chain times

By Andrew Dawson, **MD** at MACmobile

THE Covid-19 pandemic has seen companies working hard to optimise their supply chain, adapting to these unprecedented challenges by adopting digitisation, mecha-nisation, and automamechation to optimise operations and efficiencies. The fast-moving consumer goods (FMCG) industry and its supply chain backbone in particular have had to evolve quickly to meet consumer demand whilst ensuring that stock levels remain optimal and accurate. The challenge is how do you continue to adapt to this new normal whilst providing some form of human interaction that forms an integral part of your business and sales drive?

Call centres, for one, remain the first point of contact for both partners and consumers which meant that organisations had to quickly provide some form of contact despite lockdown restrictions.

Conversely, workers such as call centre agents and salespeople have had to - while working remotely provide services that ensure optimum interaction and ser-

vice delivery despite not having access to a physical office infrastructure.

Fortunately, there are mobile solutions available that provide the requisite functionality to modify existing business processes, providing the neces-sary tools for working from home (WFH) while still gaining access to vital information and importantly engage with customers.

And it's these organisations in the FMCG and other supply chains that have harnessed mobility - be it as part of an existing enterprise resource planning (ERP) functionality or a new solution – that have managed to weather the proverbial storm while still providing an adequate human element. From one central

Software-as-a-Service (SaaS) application, for example, call centre agents and sales staff can view and update call cycles, track their daily call schedules and importantly ensure that stock is available both in the warehouse and at the various retail partners. This is all enabled seamlessly from remote locations.

With a mobile solution, users can keep their customers top of mind, capturing preorders on-the-go while



keeping an eye on realtime stock levels.

It is also these SaaS customer relationship management (CRM) solutions that will see the supply chain industry continue to employ a WFH policy despite the phased unlocking. Those that have managed to keep business ticking regardless of restriction challenges will continue to build on this successful foundation. This while tailoring it to make operations smarter, adaptive and resilient.

Simplicity has also become the name of the game, utilising apps and user-friendly interfaces to readily gain access to information such as generating or downloading an updated pricing catalogue. This in turn will create an integrated and seamless stream throughout the entire channel – be it from retailer, wholesaler and manufacturer or

Whilst this is not by any means new technology, it will become an invaluable tool in a time when direct interaction isn't always possible - ensuring that organisations work smarter in spite of restrictions and chal-

vice versa.

lenges. Furthermore, technology such as data analytics will equip the supply chain with the means to harness and manage the health of their organisation. It will provide valuable insights into specific trends in supply and demand as consumers start adjusting to the new normal.

Ultimately, technology will play an important role in providing the supply chain with information that it needs to meet customer demands in realtime while also readily adapting to an everchanging and challenging landscape.

Warehouse on demand

By Martin Bailey, **Industrial Logistic** Systems.

Run out of space? Looking for a new warehouse facility? Should you build a new facility or should you develop your own world-class infrastructure?

IN the commercial office space, there is a huge oversupply. This has slowly led to extensive discounting



now easily pay R2 als. I see gross rentals for many facilities dropping well below R40/m2 per month. As developers all desperately chase the companies that are still growing, I reckon new build costs will also drop The COVID-19 lock-(possibly well below R60/m2 per month). So, if you want a new warehouse, you are in a very powerful position. I am sure there are some good deals in the pipeline.

Don't: Work them too hard for too long

Whether it's a single day without many breaks or a long stretch during which employees don't take any time away from the job, when workers feel tethered to their roles, Do: Think outside the box for compensation

It's often said that the best ways to ensure a business can both attract and retain talent is with strong pay

of office space in certain areas. If you are a blue-chip client, today you can pick up space at 50 to 60 percent of what you would have paid five years ago. However, in the warehouse space things are a bit different. Here are a whole lot of influences:

- The market centre has changed over the past few years, for example, from the traditional East and West Rand to places such as Linbro Park,
- Longmeadow and Midrand.
- Warehouses have changed shape. We now build most facilities 15 m to 20 m high, with special floors and related integrated docks.
- Many developers have been doing well in the warehouse space (demand sometimes exceeding supply), and that means the cost of existing warehouse supply can be as high as new space.
- Many of the older facilities maximised buildings on the sites and did not focus on receiving and dispatch of trucks. This has pushed clients to rather develop new infrastructures.
- Centralisation has led to the growth in warehouse sizes. The general trend is bigger rationalised facilities are better.
- Land prices in 'popular locations' have grown way above inflation - you could

000/m2 for land. This has pushed up the price of new developments

So, where to from here?

down will certainly have a massive in[]uence on many operations. Some will survive and grow (if you are in food consumables or medicines). Others will have to downsize (if they survive). In the medium term, lots of existing

facilities will become

available at lower rent-

Reprinted from Logistics News - visit www.logisticsnews.co.za

Skills development opportunity offered

SYSPRO will be providing 500 recently unemployed individuals in the manufacturing and distribution sector with unlimited access to SYSPRO Learning Channel, an online platform, at no cost for a six month period.

This initiative aims to increase a candidate's chance of being successful in today's exceptionally competitive market adversely impacted by COVID-19. The full effects of the pandemic are still unknown. however,

according to Quarterly Labour Force Survey released on February 11 by Stats SA, South Africa's unemployment rate stood at 29.1% with a decline of 39 000 jobs recorded in

Manufacturing. A survey focusing on the impact of the COVID-19 pandemic on employment released on May 20 by Stats SA showed that 8.1% of respondents had lost their jobs or had to close their businesses. While this does not represent the general population of

South Africa, it gives an early indication of the impact the Covid-19 pandemic will have on the economy and

unemployment levels of the country. By applying to the initiative, candidates will learn new skills improve their and knowledge of ERP and increase their chances of becoming more

marketable. As a global initiative, candidates from all of SYSPRO's operating regions will be considered including the US, Canada, Africa,

UK, Asia and Australasia. To qualify for this opportunity,

- The candidate must be currently unemployed and have recently lost their employment due to the global COV-ID-19 pandemic.
- The candidate must have work experience in the Manufacturing sector.
- Preference will be given to candidates who have experience working in one of SYSPRO's Target Market

industries (please refer to below link for further details)

Preference will be given to candidates who have ERP experience.

To learn more and apply for this opportunity view the links below:

South Africa - https:// jobs.jobvite.com/syspro/ job/oT2Fcfww Africa - https://jobs. jobvite.com/syspro/job/

oU2Fcfwx USA - https://jobs.jobvite.com/syspro/job/

oc1FcfwO Australia - https://jobs. jobvite.com/syspro/job/

o02FcfwD Singapore - https://jobs. jobvite.com/syspro/job/

oX2FcfwA Canada - https://jobs. jobvite.com/syspro/job/ oW2Fcfwz

UK - https://jobs.jobvite.com/syspro/job/ o0LJcfwq

Terence Moolman, SYSPRO Chief HR Officer states, "The impact of the pandemic has been felt by all sectors and induswould like to take this opportunity to thank manufacturers and distributors around the world for continuing to work and support the economy. As a call to action, we would like to encourage individuals within these two sectors who meet the above criteria to apply and take advantage of this initiative. SYSPRO hopes that by offering this opportunity we can make a difference in someone's life."

tries globally. SYSPRO

More entrepreneurs benefit from skills development programme

SATURDAY, 4 July was graduation day for 14 entrepreneurs who successfully completed the COENG Business Skills Development Programme.

The three-month presented course by COENG in partnership with Anglo American Platinum, provided the entrepreneurs with training in valuable business basics like general management, finances, human resources, marketing, safety and quality management, and entrepreneurship. Held in Mokopane, Limpopo, the event

was hosted under strict adherence to Covid-19 guidelines.

The graduating companies included Dorcas Paulos Projects, SNM Development Projects, Diphihlalo Trading, Dobra Cleaning & Maintenance, Mantisi Engineering & General Maintenance, Nareadi Industries, Monakwe Contrac tors, Komama, LAMSI Construction & Projects, Moleleko Trading Enterprise, Mmagojeso, Sinha Trading Trading153CC and Construction, Civil Prinico Pty Ltd.

COENG opera-



manager for tions mining and workshop presenter Louis Labuschagne welcomed attendees who included graduates and Anglo American Platinum management. In his address, Labuscha-

gne said the day was all about celebrating the graduates and rewarding them for finishing their session on a high note. "We now have 50 companies that have gone through the course. The strategy

has always been to try and host between 10 to 15 companies at a time. It takes three months and if we can do three programmes a year, we can assist at least 30 companies annually," said Labuscha-

gne. "We have experts presenting the various classes, the students are diligent in attending the classes and it must make a difference, it must change the way we do business and the way up-andcoming entrepreneurs manage their businesses so they become sustainable."

American Anglo reliability principal engineer, asset strategy and reliability, for Platinum, Natalie Fourie attended the graduation and stated "When this initiative started, I was the acting asset manager at Mogalakwena Complex and COENG approached us and said they want to put back into the community, not just with money and building things but skills wise and management wise," said Fourie. "We have seen so many of the businesses in the local community; they want to quote, they want to be involved in the tenders, but they lack some of the basic business skills to excel, so COENG put this programme together with this being the fourth group to go through this programme".

Online education support solution for learners

TELKOM has announced a complete online education solution for learners through the Lightbulb Education platform that can be used seamlessly between school and home. Lightbulb Education focuses on the goals of the learner

and creates a path to achieve this goal through a personalised learning journey. Allan Mushabe, CEO and founder of Lightbulb Education, says that technology is transforming the way we learn exponentially and this partnership with

Telkom ushers a new innovative approach to digital education and training.

Currently learners, teachers, and parents are using a combination of platforms and material to continue learning at home and to catch-up on the

Lightcurriculum. bulb Education combines these learning experiences onto one platform. The platform focuses on mathematics and the sciences for Grade 10 to Grade 12 learners with the addition of Grades 7 - 9 on 1 August 2020.

"True to our brand promise of leaving no man behind, the service is offered for free Telkom customto ers and we have also zero-rated data for all Telkom customers which means that all customers can access it for free both on

mobile and fixed line products," says Wanda Mkhize, Executive for Content at Telkom

Learners are able to cover specific topics by grade, test themselves, and participate in group tutoring sessions. The platform empowers parents to keep track of their children's progress through personalised reports and notifications. Teachers can also use the platform to prepare lessons, create tests and assessments, and monitor class progress on learning material.

Virtual operator training offers learning without limitations

By Matthew Masarik, Marketing Manager, Design Software. **Rockwell Automation.**

GIVING operators the robust training they

way in the industrial workforce. And if you want to protect your current productivity, quality and safety performance levels, it's vital that you give new, less experienced oper-

disruptions

create a virtual

to

environment. Putting operators inside a dynamic digital twin model means they don't need a physical machine to train, nor do they need to be in the same location as

operations and learn how to respond to exceptional situations.

For example, you can inject simulated faults and extreme conditions into the training process. Then, after an operator completes the scenario, you can give them feedback to help them understand if they responded appropriately. If needed, you can also run the scenario again to help them improve their response.

trained on an assembly task, digital cues like moving arrows can help them identify the specific part they need to pick up, and a glowing or highlighted assembly fixture can

before they're put into the pressures of live production.

Benefits beyond training

Virtual training can workers build

Training free from

Virtual training uses a digital twin, or digital replica, of your physical production assets

training environment.

need to do their jobs effectively can be difficult today for many reasons.

Perhaps chief among them are production pressures.

A major demographic shift is under-



ators the competencies they need and pass on historical knowledge from seasoned workers

This is why it may be time to rethink how you provide operator training.

There's no need to stop a physical machine or wait for a new machine to arrive to train operators. Instead, you can digitally recreate the machine to a high level of detail. And you can apply physics to the machine to mimic how it moves and interacts with people and other machines. Operators can then

access the digital twin on a device screen or by using a VR headset to train in a safe, immersive training

the machine. Consider the flexibility of training on a machine model anywhere in the world.

More flexible training

There are only so many production scenarios that you can replicate in physical training. Because of this, workers may not be prepared for certain situations when something goes wrong.

With virtual operator training, workers can learn to keep production running in ideal

Improve competency

Virtual training can help operators learn their jobs in new and more effective ways. Digital cues, for example, can help guide workers during training. If a worker is being

help them identify where they need to place the parts.

Then, you can remove the digital cues to see if the operator can complete the risk without them.

Workers can also be free to make mistakes in virtual training without worrying about disrupting production. If an operator does something wrong, that action can be recorded for remediation purposes. And operators can be required to demonstrate their competency in training

neip their skills and competency in a safe, immersive environment where mistakes have no real-world consequences. But the training can also help your business in other ways. You can observe operators or get feedback from them about tasks, for example, to identify ways to make those tasks more efficient. And you can train and test operators in the virtual world to see if calculations like throughput rate estimations are realistic.

OTR driver fleet management solution

CTRACK by Inseego the global supplier of vehicle tracking, insurance telematics and fleet management solutions introduces the new "On The Road" (OTR) driver fleet management solution.

Utilising the robust and modern Garmin Fleet 790 device as the hardware and the proprietary Ctrack fleet management software, customers are now faced with even more features to ensure the productive running of their fleets and drivers.

The IP67-rated device is a fleet telematics tablet with modem and integrated dash cam. The device is a high-quality, purposebuilt out of the box solution equipped with best-in-class hardware, and was chosen by Ctrack due to its innate functionality.

It features a 7-inch capacitive multi-touch display with embedded 4G modem and open-SIM cellular connectivity. The Android device is fully customisable and comes with always on internet connectivity, WiFi, Bluetooth and Nearfield Communication Capability.

The unit is provided with a powered magnetic mount with mini USB and USB Type A connections. Onboard maps are provided with free lifetime updates. The device is tough and optimised specifically for long-haul commercial truck use. Its convenient, easy-to-use magnetic mount makes it easy to remove and use outside a truck or van.With this OTR solution, it is possible for Ctrack to provide users with a virtual driver ID. Companies can set up virtual driver identification numbers which are required when a vehicle's ignition is turned on. The virtual pin is configured on Ctrack software and identifies the driver of the specific asset to allow driving behaviour and driving habit tracking. Fleet managers can then take action to ensure driver and asset productivity.

When used in com-

calls can be limited to predefined numbers to restrict unauthorised/ private calling and the duration of single outgoing calls can also be set. A built-in safety feature stops all device interaction when vehicle speeds exceed 15km/h.

The OTR solution records driving events as the vehicle is mov-

ing. Data is stored locally on a SD card within the device. Up to 72 hours worth of driving data can be saved to the SD card, depending on storage

capacity. Three minutes of driving footage are automatically saved when an incident such as harsh braking occurs. A minute is

captured before, during and after such an event occurs. These events are stored on the device's onboard memory to avoid being overwritten.

Tasks or jobs can be sent to the OTR device for drivers to accept and then be navigated to. Job progress can be seen by management in real-time. A driver behaviour interface provides driving statistics to drivers on their driving behaviour.

Drivers can change their status on the device should they have completed tasks, or are otherwise temporarily unavailable. These statuses are pre-configured by Ctrack so drivers do not have to type them. Operations

staff can see these status updates and decide whether or not to send further driving tasks to said drivers.

It is also possible to create custom forms on the device such as preinspection sheets, and it also allows drivers to take photographs of damage to vehicles. Furthermore drivers can also capture fuel fill ups at service stations and capture their vehicle's odometer readings. All this data can then be uploaded to the cloud-based system for further analysis by fleet operators.

With the new OTR fleet management system from Ctrack, drivers and assets are now more productive, and "Always Visible".



bination with Ctrack's NX35 hardware, the device can facilitate two-way voice communication with drivers. This requires that the Ctrack sim card be voice-activated. Drivers can then be contacted directly through the device, either by voice or by text message.

The new OTR solution comes with a hands-free voice kit. An auto answer function can be configured, which is ideal for when drivers are already out on the road. Outgoing



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STELLANTIS The name of the new group resulting from the merger of FCA and Groupe PSA

IN a major step as they move towards the completion of their 50:50 merger as defined in the Combination Agreement announced on 18 December 2019, Peugeot S.A. ("Groupe PSA") and Fiat Chrysler Automobiles N.V. ("FCA") have announced that the corporate name of the new group will be STELLANTIS.

STELLANTIS is rooted in the Latin verb "stello" meaning "to brighten with stars". It draws inspiration from this new and

ambitious alignment of storied automotive brands and strong company cultures that in coming together are creating one of the new leaders in the next era of mobility while at the same time preserving all the exceptional value and the values of its constituent parts. STELLANTIS will combine the scale of a truly global business with an exceptional breadth and depth of talent, knowhow and resource capable of providing the sustainable mobility solu-

tions for the coming decades. The name's Latin origins pay tribute to the rich history of its founding companies while the evocation of astronomy captures the true spirit of optimism, energy and renewal driving this industry-changing merger. STELLAN-The TIS name will be

used exclusively at the Group level, as a Corporate brand. The next step in the process will be the unveiling of a logo that with the name will become the corporate brand identity. The names and the logos of the STELLAN-TIS Group's constituent brands will remain unchanged.

As previously stated, completion of the merger project is expected to occur in the first quarter of 2021, subject to customary conditions, closing including approval by both companies' shareholders at their respec-Extraordinary tive General Meetings and the satisfaction of antitrust and other regulatory requirements.

New transport fleet – reduces carbon footprint



Milestone celebrated

ISUZU Truck Centre (ITC) Cape Town is celebrating a significant milestone with the achievement of a level 1 score on the dealership's most recent Broad Based Black Economic Empowerment (BBBEE) audit.

"The strategies which we have deployed have benefitted the business as well as those whom we developed for the longer term," said Dealer Principal, Eric Ackerman.

He explained that ITC Cape Town, which is situated in Epping, was committed to transformation and to this end was pursuing various initiatives, including the provision



Micheal Ndevu, (left) owner of Ndevu Car Wash and Valet, with Eric Ackerman, DP of ITC Cape Town.

of support to level one suppliers and embracing the Youth Employment Service (YES) Programme.

This year Isuzu Motors South Africa created opportunities for 72 candidates to participate in the YES has taken on two YES Programme - thereby candidates to gain work



experience at the dealership. The YES programme was launched President Cyril bv Ramaphosa in 2018 with the aim to offer young South Africans paid work experience. Micheal Ndevu, a

former diesel technician at the dealership, is now one of ITC Cape Town's enterprise development suppliers and the successful owner of the company, Ndevu Car Wash and Valet. Ndevu, who started out as an apprentice at the dealership employs nine staff members through his company, and plans to expand his business into providing cleaning and sanitisation services

Leon Nel from Volvo with Engen GM Supply Chain, Adnan Adams and Sharveen Maharaj, Head of logistics and distribution.

ENGEN has taken another step towards reducing its carbon footprint and meeting the needs of its current and future customers after adding 17 new Euro 5 vehicles to its bulk transport fleet.

The 17^{technologi-} cally-advanced Volvo vehicles, as well as 14 new semi-trailers vehicles, were officially handed over at the company's Johannesburg Terminal at Langlaagte recently.

Adnan Adams, General Manager: Supply Chain says "While the new vehicles enable us to deliver superior cus-

tomer service to our retail and commercial network, and by extension to keep South African motorists and industry moving, it is exciting to see our business evolving and meeting the environmental challenges we are faced with."

The new vehicles will play a part in ensuring Engen maintains a responsible Health, Safety and Environmental (HSE) presence as they come fitted with advanced engine tech-

Engen's Head: Logis-

nology which helps reduce emissions. Sharveen Maharaj,

tics and Distribution says ensuring the safety of the company's drivers and reducing road related incidents is top of mind and a key focus.

"Advanced technology such as road sign

"Engen currently operates 35 vehicles that meet Euro 5 standards...'

recognition software is able to detect overtaking restrictions, road type and speed limits," says Maharaj.

"Distractions are therefore minimised with easily-viewable information displays, which increases the driver's ability to perform efficiently, safely and comfortably.3

Engen currently operates 35 vehicles that meet Euro 5 standards, all with reduced emissions

technology. The 17 new Volvo vehicles offer I-shift automated mechanical 12-speed gearboxes, an electronic fail safe overfill system, and product retainer sensors, as well as brake interlocks to prevent the vehicle from driving away whilst still attached to loading hoses. Adds Maharaj: "We continuously assess new technology to improve agility, reduce costs and respond to environmental changes in our Supply Chain. "These new vehicles will ensure that we deliver safely, on time and in full and will thus ensure that our customers receive the best possible service, with our increased fleet utilization, and faster loading and offloading times."

NEW Engen 1app pushes all the right buttons

Engen has announced the arrival of their new Engen 1app, which conveniently offers motorists a safe and contactless way to pay.

As South Africa eases the Covid-19 lockdown restrictions, many more motorists are expected on the road and visiting Engen, the country's favourite petrol stations*, says Seelan Naidoo, Engen General Manager: Retail.

"In preparation, we have fast tracked the launch of our new Engen



1App and encourage all motorists to download it because it offers a safer customer service experience, as there is no touching of devices, cards or cash required."

The health and safety of customers is of primary concern and importance to Engen during this time, which is why Engen is consistently implementing a number of hygiene measures across their market leading 1 000+ service station network.

"This includes regular sanitising of all equipment, services and surfaces, as well as strict adherence to all personal hygiene measures including social distancing, hand washing, sanitising and face masks worn at all times." adds Naidoo.

By downloading and using the Engen 1app, motorists will no longer need to carry cash or cards to make fuel purchases; and loyalty points will automatically be registered with Engen's respective loyalty partners, including Clicks Clubcard, FNB eBucks and Edcon Thank U.

Other benefits include an interactive Engen service station locator, a vehicle logbook to track your mileage, full record of your purchase history and special promotions, all offering customers a gateway to the future of convenience motoring.

So, don't delay....download the new Engen 1App today by simply visiting the Google Play or Apple App store.

"Join Engen's exciting digital drive and enjoy a safe and convenient driving experience," urges Naidoo.

* As voted for 9 consecutive years (2011-2019) in the Sunday Times Top Brands survey. Engen has also been voted the "Coolest" petrol station for 10 consecutive years (2010-2019) in the Sunday Times Generation Next Brand survey.



Welding apprenticeship programme to boost skills base

A lack of apprenticeship opportunities is seen as one of the main obstacles facing artisan learners in South Africa. The issue is that while students may achieve a suitable qualification at a TVET college, they subsequently discover that they cannot obtain the necessary work experience to enable them to acquire a job.

Realising this, the Southern African Institute of Welding (SAIW) is championing work-based apprenticeship learning for the welding industry through the SAIW Foundation and the Quality Council for Trade and Occupation (QCTO). The programme provides aligned, professional training and service standards, with the aim of supporting the overall economic growth of the industry through skills delivery and international standard qualifications.

Business SAIW Development Manager Etienne Nell com-"Welding ments; industry apprenticeship training has been plagued with profit-only focussed training centres, outdated curriculums and poor skills standards and workplace service delivery

Many welding apprentices were therefore failing to secure work and employment opportunities were lost due to non-aligned skills training or occupational competency."

Through the new single, integrated learning programme; all traineeships will be facilitated through the employee according to the QCTO curriculum and based on targeted skills training standards at the SAIW. The new Dual System Learning for apprenticeships will combine industry designed curricula, technical and imulated nractical training at the SAIW, backed by authentic workplace experience overseen by qualified and experienced employed welders. elaborates; Nell "This means fabricators select and manage their own employees, register them for the desired training standards for the services they require and the employee is able to complete their apprenticeship on the job and according to industry requirements of the recognised standards



of welding expertise required at their work-place."

Economic productivity and higher employment

The new, industrydesigned curricula programme will ensure an apprentice of 1 310 hours theoretical training, 1960 hours of simulated welding training and 2 200 hours of workplace experience, resulting in a new qualification which reflects occupational competence, Trade theory, simulated practice and workplace capability. Qualifications which will assist apprentices achieve economic productivity and higher employment returns in their chosen speciality. Benefits for industry

employers include the resulting productive value of the apprentice's work, SETA grant support towards apprentice training costs, a Tax-break from SARS and B-BBEE scorecard points for skills development for the welding industry.

Showing full commitment to the QCTO curriculum and the new Dual System Learning for Apprentice's programme, the SAIW will also assist in maintaining the required training results for external assessment, as required by QCTO.

Nell explains; "Working together with the SAIW, the QCTO and the International Institute of Welding, the industry as a whole is ensured of the best possible outcomes when supporting quality assuring workplace learning to national qualification. They will have skilled employees trained to industry standards and acculturated to the company, meaning there is lower risk to quality and service, lower-cost recruitment and better employee retention."

Employer support is vital

In support of the Dual System national and internationally recognised diploma, the SAIW is calling on the welding industry to step forward and show its support through providing Apprentice Contracts for employees and agreement towards a Memorandum of Understanding (MOU) with the SAIW concerning quality assurance.

SAIW Executive Director John Tarboton describes it as a win-win situation of economic benefit to the industry which couldn't have come at a better time given the current economic crisis the country finds itself in. He stresses however, "The reality is that we can't do it alone. We need industry commitment and financial support to drive this programme. which makes perfect business sense given that it will ultimately lead to the delivery of highly skilled welding artisans of international standard and an overall deepening of South Africa's skills base.

Excellence in cast iron welding: Lloyd's Register certification

WITH this certification, Castolin Eutectic is the only company whose cast iron welding alloys, for hot and cold welding, are listed in Lloyd's Register «Supplementary List of Welding Consumables». They are particularly suitable for foundries and repair shops that weld cast iron parts that are subject to Lloyd's Register supervision.

These arc welding alloys are also important for companies carrying out procedural tests in accordance with LR's 'Rules of Shipment'. Therefore, constant quality is guaranteed by the annual inspection by Lloyd's Register and the audit according to the quality standard DIN EN 9001.

EutecTrode 2-24 cast iron welding electrodes

Ideal for workshops and maintenance departments where good, all-round properties of a universal cast iron electrode are required. High mechanical strength, good bonding and exceptional weldability in position. Excellent overall weldability, low resultant hardness in heat-affected zone. Applications: e.g.: Machine tool slides,

bearings, crankshaft housings, cable drums, slide rails, rack and chain wheels, turbine blades, gaskets, valve bodies and the housings of electric motors, compressors and pumps. Certification according to Lloyd's Register: Certificate n^o PRJ 11088637- A/02 A1 Properties fs***-20

EutecTrode 2-26D cast iron welding electrodes

Hot welding cast iron with similar metal applications in manufacturing, fabrication and repair of nodular iron castings (GJS) as well as grey flake iron castings (GJL). Repairing casting defects, blowholes, porosity, etc. Certification according to Lloyd's Register: Certificate nº PRJ 11088637- A/03 A1 Properties cq***-*

Applications: e.g.: turbine housings, motor and gearbox housings, fitting housings, rotor hubs and gearbox housings of wind turbines.

EnDOtec DO*23 cast iron welding wires

Cold welding cast iron with dissimilar metal applications for joining and surfacing castings with nodular or grey "They are particularly suitable for foundries and repair shops that weld cast iron parts..."

flake graphite and malleable cast iron. Highspeed application with low heat input and highest mechanical properties, strength and elongation, for repairs and joints with Maximum Safety Margin. Also for joining cast iron to different steel-grades. Certification according to Lloyd's Register: Certificate nº PRJ 11088637- A/04 A1 Properties fs***-20

Applications: e.g.: Large fittings, machine tool slides, bearings, slide rails, gears, turbine blades and housings, crankshaft housings and valve seats.

Lloyd's Register is one of the world's leading providers of professional services for engineering and technology - improving safety and increasing the performance of critical infrastructures in over 75 countries worldwide. The profits they generate fund Lloyd's Register Foundation, a charity which supports engineering-related research, education and public engagement for a safer world.

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Fractional filling of LPG now possible

CUSTOMERS who cannot afford to refill an entire gas cylinder now have the option of buying nominal amounts of Afrox liquefied petroleum gas (LPG) at a Pay as you Gas^{M} station.

PayGas developed a proprietary technology that fractions gas purchases into smaller quantities, making the purchase process more flexible and affordable to low-income households in South Africa. The technology is powered by a pay-asyou-go USSD software payment platform combined with a cashless refilling station and mobile app, connected to a barcode on customers' cylinders. PayGas users can purchase a prepaid voucher via their cell phone at any spaza shop or the closest Pay as you Gas[™] station, and use the PayGas app to fill their Afrox Safety Gas cylinder, totally or partially, for as little as R10, at a Pay as you Gas[™] station.

Oftentimes, low income households cannot afford to swap an empty cylinder for a full sealed one before their next pay, forcing thousands of individuals across the country to revert to alternative sources such as paraffin, char-



Afrox and through a

micro-franchising with

Pick n Pay Market

Stores owners, PayGas

plans to roll out five

new Pay-as-you-Gas[™]

stations within the

next six weeks, includ-

ing Philippi Village, Gugulethu, Nyanga,

Langa and Kayamandi.

PayGas will also roll

out three additional

stations in Johannes-

burg, and two in Dur-

Afrox will install

LPG dumpy tank stor-

age vessels at each Pay-

as-you-Gas[™] station,

shaped in a unique

ready-to-use container

developed by Pay-

Gas, and supply each

station with approxi-

mately 2 500 cylinders

to ensure sufficient

cylinder stock. Afrox's

lighter and more port-

able 5 kg Safety Gas

cylinders were specifically chosen for this

market where residents

often have to carry cyl-

inders from gas depots

to their homes.

ban during 2021.

coal, wood or expensive grid electricity.

PayGas has already rolled out a pilot Payas-you-Gas[™] station in Delft, Cape Town, servicing more than 4 000 low-income residents in the township. "With Afrox's LPG supply, support and expertise, we can now execute on an ambitious plan to roll out several Payas-you-Gas[™] stations catering to close to 200 000 customers across major townships in South Africa in the next 36 months," says Hoeblich. Philippe Founder and CEO at PayGas. "I founded PayGas in response to a gaping need for flexible affordable cooking energy for lower income households in urban areas in South Africa and we can't wait to execute on our ambitious plans to cater to more households in more cities in the country.' with Together

By Ebeth Van Heerden, Schroders Head of Intermediary – South Africa



THE year 2020 hasn't been short of unprecedented occurrences and unexpected surprises. On Monday 20 April for the first time ever, the price of West Intermediate Texas (WTI) crude oil, the benchmark price for US oil, fell into negative territory. While oil has rallied since plummeting below zero in April, the spike in Covid 19 cases in several US states has raised fears of a further decline in the demand for oil – with experts saying prices are unlikely to return to three-digit levels ever again.

What precipitated April's historic sharp fall? It was primarily because of a technicality of the global oil market and a lack of storage capacity. Don't be put off by this explanation; there's a simpler way to describe what happened using a locally grown favourite fruit: the avocado.

Avoiding rotting avocados

If you are an "avo-ontoast" regular, you may understand the avocado market very well. You know that prices can wildly fluctuate depending on the season – because they grow in winter, they're usually cheaper at this time of year and prices tend to rise during summer when they're out of season.

Let's say to take advantage of the situation, you put in a bulk order in winter of 1,000 avocados for settlement in the summer. The avo seller is happy because he's sold his avos in advance and you're happy because you believe you could make a profit when you sell them on to the local grocer at a higher price in the summer (no, they're not all for you!).

However, unbeknownst to you, one farmer had ramped up production and planted five times as many crops as usual so the market



becomes flooded with avocados.

How avocados can help you

understand what's going on

with oil prices

coronavirus Then arrives, countries all over the world go into lockdown and no one is going to the shops to buy avos so there's a huge drop in demand. Your 1 000 avos coming to market represent a further sharp increase in supply for the local grocer; consequently he no longer wants to buy them from you. At the risk of having 1,000 avocados rotting in your house, you are willing to pay the gro-

The oil market's gone (avocado) pear-shaped

your hands.

cer to take them off

That, in a nutshell, is what happened to the price of WTI in April. There was a contract for delivery of crude oil in May which was due to expire on 21 April. Anyone who had bought such a contract was obliged to be ready to take physical delivery of the oil on that day and store it at substantial cost.

Oil traders, who trade such contracts, never want to take physical delivery of the underlying commodity (barrels of oil). They just want to make a profit on buying and selling the contracts at the right time. As in our avo analogy, you never actually wanted 1,000 avos for yourself – you wanted to sell them on to the grocer the whole time.

Like the market for avos, the oil market was already flooded because Saudi Arabia had ramped up production earlier in the year, and with countries in lockdown and transport routes closed, there was also a lack of demand. This combination not only put pressure on prices but also meant that storage capacity was starting to run low. Then suddenly these oil contracts were due to expire which meant a whole lot more supply coming to the market. With nowhere to store it, the owners of the contracts were so desperate to get rid of the contracts that they were willing to pay someone else to take the contracts or take physical delivery (much like you were willing to pay the grocer to take the avocados off your hands rather than leave them to rot in your house).

Negative prices not the norm

While negative prices are quite a rare event, you can see how they're not impossible. While the WTI price has recovered since April, experts expect it to remain volatile for the next few months at least. And whether or not you're a fan of avo's, price fluctuations are an important factor to consider in forecasting any household budget expensing.

New LPG pricing formula

THE South African Department of Mineral Resources and Energy (DMRE) has switched to a new formula for calculating official domestic liquefied petroleum gas (LPG) prices, linked to Argus calculations of freight and logistics costs. The formula will be used to generate an import parity price and is based on Saudi Arabia's official contract prices for butane and propane, and a freight element produced by Argus, all published in the daily Argus International LPG report.



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OPINION

South Africa's recovery cannot be driven by an ideological fantasy

By Gerhard Papenfus

SOUTH AFRICA needs an extraordinary plan and a huge amount of political will to dig itself out of the proverbial hole we find ourselves. The ANC's discussion document 'Reconstruction, growth and transformation: building a new inclusive economy', is not such a plan. Although the heading looks promising, that's where it ends. Since it is built on sand, nothing good will become of it.

It's not that nothing will become of it, it's just that nothing good will come from it. If the ANC can find the trillions of Rands this ambitious plan requires to be implemented, it will indeed excite the few who are bound to benefit spectacularly from it.

In a display of enormous political opportunism, the ANC is using the Covid-19 human tragedy to advance their nationalist-socialist agenda. The fact that the ANC has grasped onto this opportunity, testifies of its inherent mischievous creativity. Instead of solely focusing on saving lives, they were hatching an alternative plan. The disastrous state of some hospitals (the crisis in Eastern Cape hospitals is a case in point) is proof that they have taken their eyes off the ball.

If it wasn't for the 'yellow carrot' of personal gain, nothing would have become of it. Nothing has come from the National Development Plan and Treasury's 2019 Economic, Growth and Competitiveness document, simply because there was nothing in it for 'them'. This time around, there may just be sufficiently attractive scope for personal gain for a few strategically deployed ANC politicians and cadres. In terms of the ANC's thinking, the role of the State and State-Owned Companies will be central in the planning and implementation of the plan, complemented by the pockets of excellence that currently exist within the State and State-Owned Companies, specifically with regard to 'project management capabilities' ". This is not a joke; It is actually written as such.

Within the State and in State-Owned Enterprises there are surely 'pockets of excellence', but they are very few and very far between. Collectively, these institutions are as close to failing entities that you can get, without any capacity to build on. Justice Malala articulates its condition appropriately: "... stuffed with cronies, relatives and incompetents. Honest people have been hounded out, fired or silenced ... a hollowed out state". Nothing good can, and will, come from these institutions; not in their current formats.

"In a display of enormous political opportunism, the ANC is using the Covid-19 human tragedy to advance their nationalist-socialist agenda."

Unless the State and State-Owned Enterprises are purged from ineffective and corrupt cadres, they will not be able to play any constructive role in building a better South Africa.

The ANC also envisages an expanded use of public-private partnerships in order to make this project viable. That in itself sounds promising, until you realise that the private sector's role will be dictated to by Black Economic Empowerment policies, "organically wired into the plan's configuration". Therefore, the same policies at the root of our failing State and State-Owned institutions will be central to this plan. Again, nothing good can come from that. It will cost the taxpayer trillions of Rands but, once again, South Africa will have little to show for it; not in infrastructure, job creation, poverty alleviation or the eradication of inequality.

Therefore, if this is the ANC's plan to address (in President Ramaphosa's words) the "very sad fault lines in our society", it will fail. In fact, inequality, as was the case over the last decade, will increase. Any plan excluding a portion of the South African society, is doomed to fail.

Where will the money for this plan come from? The ANC says it wants to borrow where the cost of borrowing is low. Unfortunately for them, those days are over, unless they are prepared to comply with the lenders' demands. Ideologically, that may be a bitter pill for them to swallow. Their alternative option to access cheaper finance is to lay their hand on our pension moneys - that is indeed already part of their thinking.

Caught up in their ideological cage, the ANC keeps avoiding the fundamentals required to put South Africa on a path of growth and employment. What makes them think that they will be the first ones who make a success of national-socialism? Political movements more effective than them have tried that - and failed spectacularly.

South Africa currently finds itself amidst the Covid-19 storm. These politicians have no idea what the economic tornado awaiting them is like. Enjoying the benefits of their salaries, they are detached from reality - the experiences of business, workers, the unemployed, the poor, the destitute, the desperate and the disillusioned. That is why they are under the impression that they can play with ideological fantasies.

Brunel fine-tunes next-generation digital engine

By Hayley Jarvis, Brunel University

BRUNEL University London is the first UK university to start researching car engines of the future using new single cylinder intelligent valve technology.

The electronically controlled system will supercharge engine development, helping car companies meet new emissions regulations and cut costs.

Brunel's Centre for Advanced Powertrain and Fuels (CAPF) is testing Camcon Auto's digital valves for their vast potential and precision control.



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"We are very excited to collaborate with Camcon Auto in exploring and demonstrating the great potential of Intelligent Valve Technology," said CAPF director, Professor Hua Zhao.

"The technology's flexibility and superior controllability will enable the development of the next-generation powertrain with very high efficiency, low carbon and zero environmental impact emissions."

The Single Cylinder Intelligent Valve Technology replaces the traditional camshaft on a petrol engine with digitally controlled electric valve mechanisms. This both cuts emissions dramatically and upgrades

Driveability, bringing real-time digital control and flexibility to the gas exchange process.

Compatible with most single cylinder combustion development engines, the

Single cylinder intelligent valve technology. Credit: Brunel University London.

technology works on both inlet and exhaust valves. This means researchers can focus on reducing emissions and improving fuel consumption.

"Intelligent valve technology completely eliminates the conventional camshaft and for researchers, significantly reduces time needed to do a series of experiments – and improves the consistency of the results," explained Mark Gostick, commercial director for Camcon Auto.

"Any valve event profile can be achieved, and valve position can be monitored throughout the event using a bespoke sensor. It can mimic any valvetrain, enable on-the-fly cam changes and innovative combustion strategies. We will continue working closely with Professor Zhao and the CAPF team, eagerly anticipating the results of their research projects."

The system features an intelligent actuator or 'mover' for each valve. Each is under full-time, fast-feedback control, allowing any valve timing, period or lift at the touch of a button, explained Gostick.

"It represents a huge step change for research and development departments, rapidly speeding up combustion development and slashing costs."



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One reason to smile

"A H WEH," greeted Luke the Dude as the happy participants in the parliament of the public house were again condemned to sharing our good cheer on electronic screens all over the suburbs surrounding the local Pub & Grill.

The pub is closed of course, as per decree of Luthuli House, the unrepresentative politburo running the ANC and thus misgoverning South Africa.

"What is this stupidity?" enquired Luke in a state of understandable vexation, "this braindead destruction of our country and the livelihoods of those who live in it? One out of three, and counting, willing and able workers are jobless and skint."

"We know what that means," reminded Miss Lily, "no food on the table for them and their families. Or their employees. Literally millions of South Africans are hungry. We do what we can for the families we know – our domestic still cannot come in for her mornings because she cannot leave the children alone."

"Yep, Ramaphusa is keeping the schools closed," frowned Luke the Dude rudely. "Surrendered to the unions again, most gallingly to that unpatriotic teachers' union bent on destroying our children's chances in life. How sad."

"You said it, Boyo," nodded Colin the Golfer. "It's sad to see a man's backbone turn into putu pap. Not that he dines on that anymore. Think about it, he rose to prominence as a union boss himself and he sure as hell called the shots then. What happened to that man, eh? Melting in the glare of Mini-Zuma and dancing to the tune of Ace Magashule!"

"Also that repellent police minister, Bheki Cele," contributed Irene the Queen. "The one who embarrassed even Zuma! Now he's professing this ban-the-beer thesis on reducing vehicle accidents by destroying what remains of two, yes two previously vibrant industries: the Wine Industry, well respected and growing energetically in international markets, and the Restaurant Industry with its armies of workers."

"Better for those workers and their families to go hungry – in the minds, so to speak, of the ANC Command," grimaced Jon the Joker. "With the logic they apply, they might as well ban all vehicles from the road to prevent accidents."

"Don't be surprised if they do," added Luke the Dude, "and then bombast about the will of the people while losing none of the devastation and suffering with their 'new, considerate' solution."

Even The Prof's frame of mind curdled the milk of human kindness. "What about the Tobacco Industry," said he, sucking his empty pipe. It's going down the sewer fast while Dlamini-Zuma believes smokers are people who roll and lick a zol before sharing it. Not many people know this, as Donald Trump would say. It's her way of marketing the booming cigarette smuggling business, generous donors to the ANC. "More millions of tax rands lost; billions if you count them together. Poor old Tito Mboweni is working out budgets with responsible plans to spend our tax billions... what tax billions? His comrades in the ANC Command are burning down the building where that money is produced. "Government has two sources of income in the national budget, taxes and borrowed money. Taxes have to be produced and borrowings have to be serviced. What is a poor finance minister to do when production has been disdained and dispatched? You must

borrow more, right? Even if you're in hock up to your face mask."

"Hah!" exclaimed Bob the Book. "Good luck with that. The way theft has become a major industry, the International Monetary Fund will be the only lender left with big enough vaults.

"But the problem with the IMF is, much like your bank manager they lend only to countries able to show they can pay back the money. And they set conditions to make that happen. So, surprise surprise, the IMF is despised by the ANC and their loud EFFn offshoot for, wait for it, stealing their clients' sovereignty!

"You saw the tantrums at the end of July over \$4.3 bn in Covid assistance from the IMF, at 1.1 percent interest! The risk is in the rand, but the point is, this is not the Full Monty. When that comes, the IMF turns up the conditionalities. Very painful for cadres uninterested in production while living it up on other people's money."

"You could try and con the lenders, of course," sympathised Jon the Joker, "won't be the first time. But you'll regret it. Local liberation hero Robert Mugabe borrowed from the IMF and signed on all the dotted lines to get to the loot. Then, when he had to honour the agreement, he showered the IMF with colourful language and told them to go to hell.

"Fine, have it your way.

"Today Zimbabwe is in an ever-worsening economic and humanitarian crisis and pres. Emmerson Mnangagwa is pleading for international funding. Too bad. Zimbabwe has this 'problematic debt profile', as CNBC calls it."

"Indeed," agreed The Prof. "In South Africa we are joining the same race on a horse with two names: Economic Corruption and Disaster Mismanagement."

"I do not agree," declared Big Ben on cue, "It's nasty having to pay 50 bucks for cigarettes rolled with donkey manure and having to drink alcohol-free beer, but you can't blame the government for the virus. And also not for the economic damage it's causing!"

"That's why I blamed economic corruption first, dear Benjamin," smiled The Prof benignly, being accustomed to academic bickering. "We were already in a recession before the lockdown; this year's first quarter was the third consecutively with a shrinking economy.

"Disaster mismanagement is aggravating

OPINION

ON THE CONTRARY



an already poor reality – think how fast our domestic product is contracting now."

"Keep in mind," insisted Miss Lily earnestly, "the worst of it is the heartless disrespect shown for living, feeling human beings. The government had to be taken to court to resume feeding hungry children!

"Think about it. How monstrously sad is that?

"Only in the Western Cape did we continue feeding the children when schools were shut down. Short shrift was made of the 'responsible' minister who threatened the Province for being a caring government."

And that was a reason to smile.

E-mail: noag@maxitec.co.za

When the precautionary principle killed millions

MID the fuss, palaver and worldclass panic created by Covid-19, a remarkable triumph of common sense over ideology has not got the headlines it deserved. I am referring to the triumph of Golden Rice over the decades of nonsensical opposition of Green zealots, using the do-called Precautionary Principle.

Few South Africans have heard of Golden Rice. We are not great rice eaters. We don't know why or how Greenpeace spent two decades doing everything it could to prevent Golden Rice getting into the hands of peasants in countries like Bangladesh, Indonesia, and anywhere else where rice is the staple, and often, only diet of the poor.

So what? You may well be thinking. Read on, for Golden Rice is – cue: shock, horror, indignation, OMG -- a geneticallymodified version of the grain, developed in a laboratory, designed for use in poor countries, specifically for poor people who eat mainly rice. and so on. Until this happened: More than 100 Nobel laureates in 2016 urged Greenpeace to stop its opposition to Golden Rice

For one thing, they said, Golden Rice was a purely scientific project. Big business did not drive its development. One agronomist and one scientist did.

Their motivation was simple: If Golden Rice could be grown instead of traditional varieties; it would save thousands of children's lives, and stop them going blind. An exclusive diet of rice lacks a vital ingredient for child health – it contains no beta carotene, which is converted to Vitamin A which is needed for healthy skin, immune systems, and vision.

The World Health Organization said that some 250,000 to 500,000 vitamin A-deficient children become blind every year, half dying a year later, and millions of pregnant women risked night blindness and other health problems from vitamin A deficiency, which negatively affects fetal development as well.



"Greenpeace initially, and then some of their allies, deliberately went out of their way to scare people. It was a way for them to raise money for their cause."

The laureates said while they endorsed many other activities of Greenpeace, they hoped it "would "admit that this is an issue that they got wrong and focus on the stuff that they do well."

I cannot find any logical response to this shattering rebuttal of Greenpeace. Perhaps that is just as well. Greenpeace led the opposition to Golden Rice, when the World Health Organization said it could stop deaths and disease caused by a vitamin A deficiency from which 250 million people suffer. Nearly half are children under the age of five. It is the leading cause of blindness in children. So last year's great news was that the Government of the Philippines on 10th December approved the direct use of Golden Rice in food, feed, and for processing. Approval now includes the U.S. Food and Drug Administration approval, Food Standards Australia New Zealand, Health Canada, and the Government of Bangladesh (not in that order). The Golden Rice ball is now well and truly rolling. In the 20-year contest between Greenpeace and sane science it is now Game Set and Match to sane science, and a great victory for common sense. For once.

It was enough to set off Greenpeace loonies like fire crackers on Guy Fawkes Day, or Sydney Harbour on New Year's Eve. It began a massive campaign to prevent Golden Rice from ever being something peasants could buy as seed and (shudder) plant and eventually reap and eat.

It was a Frankenstein food, they said. It was a plot by Big Business to exploit the poor who did not know the dangers of meddling with the genes of plants.

When in 2000 the journal Science published an article on the properties of Golden Rice the article was denounced as, "a hoax," "As Fools Gold," "All glitter, no gold," "More hype than substance," "Propaganda for the genetic engineering industry" and a "Golden Illusion". And so on, Taking a leaf out of the Greenpeace playbook, the laureates held a press conference in the Washington Press Club, where they said:

"We urge Greenpeace and its supporters to re-examine the experience of farmers and consumers worldwide with crops and foods improved through biotechnology, recognize the findings of authoritative scientific bodies and regulatory agencies, and abandon their campaign against 'GMOs' in general and Golden Rice in particular....

"We're scientists. We understand the logic of science. It's easy to see what Greenpeace is doing is damaging and is anti-science.