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Where does SA logistics stand?





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Responding to forces that impact the supply chain

Major disruptions to supply chains caused by the impact of the COVID-19 pandemic have driven companies to make their supply chains more resilient.

o remain competitive, South African companies need to adapt quickly and strategically to global trends and forces that shape the way organisations do business and impact the supply chain," says Detlev Duve, Managing Director of DACHSER South Africa. According to Duve, these forces include more complex, international supply chains, advancing technology, environmental and sustainability concerns and an increase in rules and legislation.



"With globalisation and a more connected world, the supply chain becomes more complex, with higher risks and greater costs," says Duve. "The persistent business necessities South African companies face in terms of cost reductions, productivity advances and performance increases make supply chain management a challenging job. Internal management of this process can be overwhelming as the supply chain is still seen as a non-core business function in South African companies. We are seeing local organisations outsource more elements of the supply chain process to a specialist provider. Outsourcing of the logistics function should be a strategic decision that offers a reduction in costs as well as improvements in sales revenue and customer service, building competitive advantage."

New technology is causing a shift in the South African logistics industry, with logistics providers extending their business functions to offer the optimal combination of technology, warehousing and transportation services.

The pandemic has only accelerated intensive digital transformation with the need for increased visibility and transparency as the top trend. "Logistics these days is as much about technology as transport," says Duve. "Across the supply chain, technology that improves information handling and decision making lets organisations gain a deeper insight into trends, customer behaviours and process effectiveness."

Environmental impact is a growing political, corporate and client concern. "We are seeing increased legislation, a focus on social responsibility, governance and a call from customers for high environmental principles," says Duve. "These environmental elements have an influence on the supply chain in a number of ways. To ensure long-term success, supply chain managers must own sustainability." DACHSER climate protection practices focus on efficiency, innovation and inclusive responsibility to help achieve the global community's long-term goal of net-zero emissions. This includes the avoidance of greenhouse gas emissions through intelligent logistics processes, energy efficiency through the use of energy-saving technologies and research support for the development of new technologies and concepts for emission-free logistics.

Increasingly strict regulation poses the next challenge for South African supply chain managers. "With the growing complexity of international markets and the significance of security, global and local legislation is imposing stricter regulations on corporations. Organisations have to be ready to disclose information about sourcing and supply chain practices. If non-compliant, they can expect to be handed heavy fines and expose themselves to other legal threats."

"Understanding the impact of these forces on the organisation and working with experts to put appropriate strategies in place will help South African supply chain managers to harness opportunities and preserve long-term competitiveness for the business," concludes Duve. •



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- Advanced Driver Assistance
- **W** Vehicle Safety Inspection
- Daily Jobs & On-Route Tasks
- Camera Al Data Intelligence

- Efficient Planning with tailored Data Summaries
- Inventory & EPOD* Integration
- **(iii)** Asset Efficiency and Replacement Planning
- Identify Fleet Risk with Heatmaps*
- **Voice Commands via Mobile Device***

^{*} Some product functions not immediately available in Africa. Image for illustration purposes only.



Maximise your business and fleet potential with Ctrack's 24/7 Bureau Service

Ctrack's Bureau Service is a fully-fledged fleet intelligence service centre offering a wide range of services, which provides you with hindsight, insight and foresight for your fleet operations.

hether a business utilises a fleet of five vans or 500 trucks, it is extremely complicated to run such an operation without telematics technology and fleet management software that goes hand in hand with that hardware. However, this software is only as useful as the person controlling it; the effective management of fleets and the data that goes along with it needs to be done by a person with sufficient training in order to get the most out of your fleet management system, enjoy the benefits and save on costs. Depending on the size of your fleet and how your business is set up, employing a dedicated person for this role might not be a practical or feasible solution.

While Ctrack offers several software solutions that allow owners or fleet managers to look after

their own fleet management requirements, including the recently launched Crystal, the Ctrack Bureau Service enables customers to pair Ctrack's world-class telematics technology with an expert fleet manager at a minimal cost.

"Use of Ctrack's Bureau Service allows customers to ensure that they are getting the absolute best out of our tried and tested hardware and software solutions and that their fleets are being run in the most effective and productive way possible," says Hein Jordt, Chief Executive Officer of Ctrack Africa.

Ctrack's Bureau Centre monitors and analyses movements, incidents and alerts meticulously, providing analytical reporting and support to optimise fleet operations. Highly experienced

Features of 24/7 Bureau Service 24/7 Emergency Support Centre **Consultancy Service Driver Monitoring** Expert Fleet Consultants unscheduled stops, vehicle abuse Tamper alarmsStolen vehicle recoveryVehicle immobilisation tailored to your needs • Variety of powerful reports available at your **Real-Time Route Monitoring** disposal: productivity, safety, travelling time, (M usage, after hours, driver behaviour, POI visits, EXCO monthly summary, and many (Illegal movement prevention) · Dedicated fleet controllers for your entire corting service Geo zone mapping and adherence · Daily health checks ied for your conveni Rich fleet analytics data: POI visits and duration count, driver behaviour, etc.

telematics consultants interrogate and interpret vehicle data to provide the insights and actions needed for future cost reductions and operational improvements. With this information, business owners will be able to implement best practice methodologies that streamline operations, save costs and focus on the core business. Reports are tailormade to your needs and can give a high-level overview if that is all your business needs or a thorough analysis of any data stream if that is required.

Utilising Ctrack's Bureau Service is a quick and easy way to streamline your fleet operation and ensure that you get the most out of your movable assets without the need for additional staff count and infrastructure. The way your vehicles are used has a massive effect on your bottom line and having expert eyes on them all the time is a sure way to secure fleets and reduce fuel and maintenance costs.

In the background, these experts monitor and analyse movements, incidents and alerts, and provide the customer with reports that are easy to act on. In essence, Ctrack's Bureau service gives you the right data needed to make the right decisions. The benefits of a 24/7 bureau service include the fact that an expert always has eyes on your assets and how they are being used, ensuring tighter control and immediate action against predetermined parameters.

These controllers pay particular attention to schedule adherence and fuel consumption, ensuring that your fleet is run as efficiently and cost-effectively as possible. Direct communication with drivers ensures swift action in the event of any deviations or transgressions and ensures that you nip trends in the bud before they become a habit and long before unnecessary resources are wasted.

The benefits for operators are multifaceted and include emergency response, panic alarms and tamper alarms that give them the protection and backup they need in an environment fraught with risks. A

bodyguard service and even air response are available to help mitigate imminent threats.

Fleet operators now demand visibility and control, resulting in standard telematics visibility no longer being a suitable solution on its own. Ctrack offers a number of camera solutions for the monitoring of various aspects of vehicle usage, including fatigue and ADAS monitoring, front and rear cab facing and trailer cameras that allow for total visibility of your asset.

These camera solutions offer live video streaming and give fleet managers the ability to view footage around incidents or other data inputs such as accelerometers or speed events and then act accordingly. However, the number of alerts and footage that need to be viewed can be overwhelming. To assist with sifting through all this data, the in-cab camera system can be paired with artificial intelligence (AI) software. As an example, this sophisticated AI software filters through the data gathered by in-cab cameras and only reports on the transgressions defined by the fleet manager instead of on every transgression.

This results in better quality data that can more easily be used to take action. AI can filter through thousands of alarms and only highlight those that are of critical importance to the fleet manager, be that in-house or as part of the bureau service. The bureau service operators will still investigate all alarms, however the AI assists in highlighting the most important ones.

"In an environment where running costs are always rising, the efficient and effective management of fleets is imperative to the success of a business that relies on moveable assets. Ctrack's Bureau Service takes the guesswork out of fleet management and ensures the best results," concludes Jordt. Ctrack's Bureau Service is offered in four levels, allowing fleet and business owners to select a package that best suits their needs and budget. •

Supply chain and technology joined at the hip...

but it should be the brain

By Doug Hunter, Manager: Customer and Ecosystem Enablement, SYSPRO, Doug.Hunter@syspro.com

As supply chains crumble with unexpected disruptions, is information technology (IT) any different? You bet it is.





into something that was unthinkable 50 years ago. But it happened. And we should know that it'll continue to become more sophisticated, more useful and more cost-effective. Warehouses and trucks are no longer at the Model T stage of development.

So, too, when it comes to IT in supply chains, application is no longer a question; it's fundamental to business existence and competitive position. Application isn't just the basic financials, a bit of planning, some inventory management and a touch of procurement – that's the past. At the bare minimum, we have to get used to the current 'new' technology so we move from Henry Ford's 'black beauty' to Ferruccio Lamborghini's eye-bending electric exotics. *Tempus fugit*, times they are a-changin' – whatever... that's the history. Get ready to apply the future – now.

Current future

Automation, collaboration and innovation are the right ideas, but are becoming passé, almost ordinary, as we apply them to the problems we believe we have. Supply chain (SC) networks are creaking as the inability to change – the arthritis of SC nodes – worsens and continual scaling up for dominance creates dinosaurs. But we didn't see that coming. We relied on a static past.

New experiential-based learning is required to solve new problems that we may face. Add scenario analysis and planning on top of root cause analysis; we have to become cognitive – thinking laterally, being open-minded, armed with risk and probability, aided by broader experience and have foresight from real data and events not over-affected by our experience and business prejudices. Gut matters – but whose gut matters too. We need to consider that some problems that need fixing are old, but realise that some are new or we'll do the same-old and be left behind.

Crystal in the office

Supply chain IT starts with looking inside our organisations. We have supply chains that ERP like SYSPRO will help when it comes to manufacturing and distribution, enabling us to become effective, competitive and profitable supply chain partners. Then we share plans, making our industry supply chains lower cost and more globally competitive.

But recent disruptions show that we need to see what's coming, and how we'll have to adapt and prepare for the likely scenarios to survive in business through disruption we didn't cause.

ERP, WMS, TMS, collaborative hubs, tracking and all business/SC applications now need user monitoring to ensure transactions are processed in a governed way. This feeds business intelligence/analytics, which must be armed with predictive capabilities – assessing what is likely to happen to supply, demand, delivery and import/export.

To augment your own experience, you must employ a new friend: artificial intelligence – the new guy that learns way faster than all of us as it learns with machine learning from the data we collect, looks for patterns, potential outcomes/events, their probability of happening, the consequential effect and the cost... what a friend it is. Add outside data/indicators using IoT that affect your world and you can predict the future and adapt in time. This is where IT and business are going – smart people thinking machines. •

Evolution or extinction

Learn more about the adoption of evolving technology in the supply chain.

By Aveshin Reddy, aveshinreddy@gmail.com and Arno Meyer, arno.meyer1@gmail.com

tewart Brand said: "Once a new technology rolls over you, if you're not part of the steamroller, you're part of the road." The recent drive by organisations to promote the digitisation of supply chains has come a little too late, with many companies facing dire circumstances. The emergence of COVID-19 highlighted the importance of building supply chain robustness and flexibility through adopting technology. Currently, supply chains are facing an entirely new set of complexities that have arisen from global changes in the form of the war in Ukraine, increasing energy prices and, subsequently, an increase in product prices.

The outdated notion that adopting technological innovations was a once-off initiative dedicated to improving a particular element within the supply chain is no longer valid. The supply chain manager of tomorrow must adopt technological trends that can evolve based on the organisation's requirements. Several evolving technologies have been implemented by organisations to prevent or mitigate potential risks that could arise both globally and locally. Below are descriptions of some of the most prominent technologies used in current times.

Adoption of flexible supply chain management software

Supply chain management software is available in a variety of different software packages, such as transport management software (TMS), warehouse management systems (WMS) and vendor management software (VMS). The goal of adopting these types of software into a business is to alleviate risks, improve communication and customer service, reduce costs, improve control and assist with forecasting and decision-making. There are many supply chain software packages that have been developed to adapt to the changes of a business, but there are only a few that can adapt to drastic changes in the operating environment. These packages are identified as complete business software packages that take various elements of a business and integrate them into one system. Unfortunately, software systems that implement this holistic approach are generally more expensive to adopt than their simpler counterparts, which ultimately leaves organisations with the age-old trade-off between price and quality.

Automation of warehouse activities

Warehouse automation is the inventory movement into, within and out of the warehouse with little human intervention. Automating warehouse activities was once perceived as a non-essential technological advancement as humans could conduct many operations instead of expensive robotic systems. The adoption of these systems grew in popularity during the COVID-19 pandemic, which highlighted the importance of adopting independent programmable systems to ensure the smooth movement of goods from the warehouse towards the consumer without reliance on human intervention. Several organisations previously considered this technology to be a threat to employees within the warehousing sector. However, it is now considered a necessity due to the volatility of the global environment, which directly impacts the availability of the labour market. Overall, the automation of warehouse activities directly impacts organisational performance and competitiveness through reduced errors due to human intervention and the realignment of organisational resources to other business processes.

Augmented intelligence systems

Augmented intelligence is the development of human intelligence using artificial intelligence. Additionally,

augmented intelligence is identified as a tool that requires the use of humans to provide deeper insights into the supply chain. These are decision support systems that are feedback-driven, self-learning and self-assuring, which emulate human cognitive abilities. Supply chain augmented intelligence systems are not independent and combine the strength of human reasoning and creative judgement with machines' flexibility, accuracy and speed to drastically improve cognitive performance and business decision-making. Some of the most prominent uses of augmented supply chain intelligence are to process spatial navigation, drive machine vision and machine learning, and improve logistic reasoning.

The development and adoption of evolving technologies within the supply chain field are growing in popularity, but are still in their foundational phase. A core contributor to the lack of investment in evolving technologies is that organisations have never faced the level of threats that are now prevalent worldwide. Technological advancements within the supply chain were once seen as a method of reducing costs and improving efficiency, which is no longer the case. Technology has now become the backbone of many organisations attempting to navigate the complexity and volatility facing business operations and performance.

Technological advancements are becoming reactive tools to counter the emergence of factors that directly impact business performance. This is a flawed approach as it takes time to adopt new technology into business processes and it should therefore be a driving force within an organisation, not just a defence mechanism against external threats. Organisations need to adopt technologies that will grow with their supply chains and serve as a solution provider during times of duress as opposed to technologies that serve as a once-off fix that will become outdated in the near future.

While the world struggles with new threats to both human health and the business environment, supply chains continue to be the support systems that maintain society and businesses. If supply chains do not evolve at a fast pace, they will also be overwhelmed and succumb to the threats facing the world of tomorrow. So ask yourself, is your supply chain evolving or facing extinction? •

Procurement as a service: Why global demand for this approach is increasing

By Leo Steyn, CEO of Dante Deo Consulting

In 2021, the global procurement as a service market was valued at approximately US\$6.3 billion. Given that the market has a projected compound annual growth rate of 7 percent for the next 10 years, experts forecast that the market is likely to reach a valuation of US\$13.3 billion by the end of 2032.



he procurement as a service industry perfectly captures the immense spectrum of procurement services delivered via a subscription or 'as a service' model. And these growth predictions show us why we need to be paying attention.

With the impact of COVID-19 sending ripples through markets, supply chain practitioners worldwide are hard at work streamlining procedures and processes to boost company-wide innovation, productivity and efficiency, which, in turn, is driving the market to develop at breakneck speed.

Considering that we are in a post-pandemic recovery period, it does not come as a surprise that there is significant demand for digital-first, agile, collaborative services that will help businesses pre-emptively identify and mitigate hazards and better manage cash flows. As a direct result of these unprecedented times, the procurement as a service model is set to transform the sourcing and procurement function.

Procurement as a service: Evolution or revolution?

But before we go any further, it is worth reminding ourselves that, traditionally, three types of procurement are common in the industry: direct procurement, indirect procurement and services procurement. Direct procurement refers to purchasing raw goods, machinery and wholesale goods directly from suppliers. Here, the key stakeholders are suppliers and procurement officers. Indirect procurement involves purchasing goods like office stationery. Although

these goods do not directly affect the company's end product or bottom line, items such as printers help employees do their work. In this case, the key stakeholders would depend on the company's size. Large corporations are more likely to have facilities managers that take care of these kinds of purchases, whereas in a smaller business, office managers could assist with indirect procurement processes.

One thing both models have in common is people. These traditional procurement approaches rely heavily on people required to physically take care of copious amounts of paperwork, make and take phone calls for progress updates and crisis management, and manually manage procurement functions. Although these activities are integral in getting the job done as part of traditional procurement, they are time-consuming and laborious and often take place in silos. These repetitive tasks fail to generate substantial savings – or profit. In a particularly volatile market, this is no longer good enough. Companies can't ignore the fact that traditional procurement fails to provide a strategic approach that makes agility possible.

Traditional versus services procurement

Procurement as a service takes a different approach: it combines technology, people and expertise to handle a portion or all of a company's procurement functions. This procurement delivery model puts procuring entities in the driver's seat, as a procurement expert will use the latest technology and marketplaces needed to effectively run any procurement process.



Often, traditional procurement is done offline using tender or RFQ notices through newspapers, letters and other outdated notification methods. Offers to tender tend to be submitted by suppliers in paper format. On the other hand, procurement as a service moves this entire process online, with RFQ notices and all related communications published on digital platforms. A clear benefit of this technology-driven model is the high level of transparency it brings, which helps all stakeholders avoid fraud and bribery-related incidents. Another advantage is that procurement processes can be concluded quickly without manual, paper-based efforts complicating the process. Most importantly, procurement as a service helps processes like strategic sourcing to become predictive, and supplier management to become proactive, which reduces operational costs.

The aim of procurement as a service is to deliver an agile, cost-effective service, ranging from strategy and delivery to contract management and supplier relationship management that ensure sustainability and enable innovation. Companies do not have to invest in large

systems and they get instant help with vendor management, preparing and running tender-related processes, category management and analytics. Considering the value this delivery model brings to companies, it is no wonder the global demand for procurement as a service is becoming increasingly popular.

Transforming procurement with a digital edge

A common misconception doing the rounds is that procurement is far too important to risk leaving it to external parties. And while this is a valid concern that should not be taken lightly, there is no denying that, for those who are willing to embrace procurement as a service, getting experts on board has the potential to transform the competitive edge of the business.

Through this 'as a service' model, it becomes possible for all companies – regardless of size or turnover – to access targeted, strategic expertise and technology at a price point that justifies the investment, positioning themselves strategically to take advantage of the opportunities that cross their path. •



Local market leaders, including Bidvest International Logistics (BIL), provide a fascinating perspective on where this vital part of the nation's economy rests and what needs to be done to address increasing threats.

outh Africa's logistics industry is battling a war on many fronts. Bad weather, equipment breakdowns and shortages and congestion continue to hamper the country's ports and add days to the supply chain, creating havoc downstream.

The conflict in Ukraine and the weakness of the rand are exacerbating the situation, with inflation skyrocketing to the detriment of consumers. In addition, South Africa is now firmly in the crosshairs of cybercriminals. Antivirus provider Kaspersky's research shows that ransomware attacks in South Africa doubled between January and April 2022 compared to the same period last year. The 2021 cyberattack on Transnet was

especially damaging, impacting ports, harbours and pipelines to the point that the state enterprise was forced to declare force majeure at several container terminals.

Lesiba Sebola, Director of Information Technology at Bidvest International Logistics (BIL), says it's paramount to safeguard IT infrastructure given how central it's become to operations. "The bottom line is the financial losses incurred. Transnet not being able to operate its ports affects us and, obviously, if there are attacks in our own environment, that necessitates downtime of the infrastructure and it is difficult to conduct business," he says.

Sebola says the most prevalent form of attack is phishing, which seeks to get information from users. "You need a multifaceted approach to protecting your information. We have perimeter security, which involves firewalls. And, with operating systems, there's always updates you need to do, whether it's an operating system update or security update to eliminate vulnerabilities that the providers have identified."

Antivirus software is another must as part of your endpoint security. "Your endpoint security is also important to protect the confidentiality of your company information in case of stolen endpoint devices. Sometimes we tend not to think about stolen goods and how they can be used in the process of a cyberattack."

However, Sebola stresses that the most important aspect of cybersecurity is user awareness. "The majority of successful attacks happen here. If your users are not aware, it's like taking a key to your house and throwing it over the security fence for attackers to use."

"At BIL, we have an online programme where staff can learn about security and the different types of attack – email impersonations, for example. If they spot an email that looks a bit suspicious, we've got a special process where they can send an alert for us to investigate. This forms part of our induction process

and occurs on a quarterly basis. We also hold an annual Computer Security Day in November."

Like Sebola, Craig Rosewarne, MD of cybersecurity company Wolfpack Information Risk, believes everyone is at risk of cyberattacks. "You could be an individual, a non-profit, a small charity, it doesn't matter. The hacker doesn't care where the money comes from," he says. "The harsh reality is that attacks can't be prevented, but organisations can defend against them provided they recognise the complexity of digital crimes and tackle them accordingly."

For Sebola, this means continuously monitoring networks to establish any irregular patterns. "You have to have an incident response plan in place, but you also can't have a prescriptive one that is generic. This plan will tell you who needs to be involved, who the contact people are, and not just from IT. You need to establish who is involved from legal, operations and the communications side because there are various aspects that you want to consider."

"When you have cyber insurance, part of the requirement is that you inform them of any breaches. It's important to keep logs from the IT side. Make sure you contain the attack so you can preserve the evidence. This is important in terms of the analysis later on to prevent such a breach from happening again," he concludes. •





HMI and PLC – the core of automation advancement

By Sbo Chili, Product Manager: EcoStruxure – IDHMI & IDMST at Schneider Electric

Automation has become synonymous with industry; whether it's automotive or food and beverage, it has fundamentally changed the way these segments operate today.



ut what lies beneath automation? Who, or rather what, are the unsung heroes of industry automation? Human-machine interface (HMI) and programmable logic controllers (PLC) are two technological advancements that have become an integral part of organisations' automation efforts.

Human-machine interface (HMI)

HMI is exactly that – software facilitating human and machine interaction, which makes it a critical component of the broader scope of supervisory control and data acquisition (SCADA) and propelling the application of the Industrial Internet of Things (IIOT) across multiple sectors.



HMI software works as a communication link or platform between individual operating machines and the system to oversee and control operations. Variants of HMI also transform data from industrial control systems into visual depictions of these systems that can be interpreted by humans for clearer understanding and analysis.

HMI enables employees to proficiently operate various complicated machines, which, in turn, offer the following benefits:

- Increased productivity.
- Heightened employee satisfaction and morale.
- Efficient documentation and storing of data.
- Mobile technologies that give workers access to guidance or remote expertise wherever they may be working (inside or even outside the facility).
- Function as powerful edge computers gathering and processing data in real-time to support advanced processes such as predictive maintenance.

 Powerful processing and networking capabilities that provide new levels of information to workers anywhere in the plant.

Programmable logic controllers (PLC)

PLC is another technology that continues to drive forward automation. It monitors the various inputs involved in the performance of machinery and enhances it to a level that makes manufacturing processes fluid and optimised.

From a technical point of view, it is a special form of microprocessor-based controller that uses programmable memory to help store instructions and execute functions such as logic, sequencing, timing, counting and arithmetic to control machines and their processes.

It contains central processing unit (CPU), digital I/O, analogue I/O and communication modules, which can smoothly operate in an industrial environment – conditioned to control different process parameters using the programme written in accordance with the industrial processes.

Importantly, to match the demands of rough industrial environments, PLCs are designed to be extremely robust and sturdy, often competent enough to function under unfavourable conditions such as unpredictable temperatures, humidity, vibration and noise.

PLCs can be applied to various mechanical functions such as:

- · Cement manufacturing.
- The smart factory.
- · Virtual modelling.

Furthermore, many PLCs today offer embedded IIOT protocols and the encryption to provide cloud connectivity and digital service.

IIOT is undoubtedly revolutionising how companies across several industries monitor their operations, ushering in continued advancements in automation and smart industry solutions. At the core of these advancements are technologies such as HMI, PLC and SCADA. •

Building efficiency:

The invisible becomes visible



By Anoop Hariparsad, Offer and Channel Marketing Manager: Digital Energy at Schneider Electric

Many commercial and industrial facilities were built in an era where technology was an afterthought. This is partly because of the lack of truly feasible technology options that could make the management of buildings simpler and, importantly, more efficient.



ast-forward 40 years and the industry now features advanced solutions that, short of running a building on autopilot, offer efficient, optimised and sustainable solutions that catapult facilities into a new era of sophistication. And, rather than being a medieval castle, the good news is that many buildings can be modernised to benefit from this new and exciting age of efficiency and optimisation.

At Schneider Electric, our methodology when approaching buildings, old or new, is to measure, analyse and then put systems in place to control. In the case of an older building, it is important to measure how it is using its energy. Is this done in an efficient manner and how can technology help?

Once an organisation understands where it is and where it wants to go, it needs to identify the solutions to achieve its goals, and a fundamental part of this journey is employing a digital strategy.

With digital innovation, the invisible suddenly becomes visible. Digital technologies such as metering and monitoring, coupled with smart devices and analytic software, allow insight into how a building operates. Moreover, it provides an understanding of the building's energy and operational efficiency, which, in turn, enables a service provider to identify areas where power can be saved and untapped areas utilised.

Making the most of your digital strategy

In a digitised building, all the vital cogs start running continuously to provide information on the data required to obtain operational insight.

Now that you have all the data, what is the next step? Analysis. Here, service providers take advantage of best-in-class operation (OT) and IT solutions to unlock the building's performance to maintain your facilities remotely and proactively.

With its key operation insights, you can reduce energy use, unscheduled maintenance and extend the life of your assets to save time and money, which all contribute to the efficiency of your building.

A building management system (BMS) realises a digitally connected building that offers 24/7 support for:

- · Air conditioning, heating, ventilation, lighting.
- Access control and control devices such as valves, actuators, sensors and meters.
- Energy management and building operating systems.

Moreover, an open BMS system integrates multiple systems for centralised, real-time control and management across one to many enterprise buildings and can help you understand and monitor your facility's energy usage.

Today, there are sophisticated solutions such as Schneider Electric's EcoStruxure Building Advisor that optimises building operations by constantly monitoring systems and identifying faults to proactively address a cloud-based suite of analytics and monitoring services that provide key insights into how to improve efficiencies.

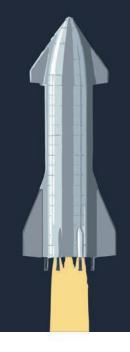
Using AI algorithms and analytics further allows you to understand the building's energy use and help transition from a reactive operating model to a more effective preventive mindset. •

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Flow: How the Best Supply

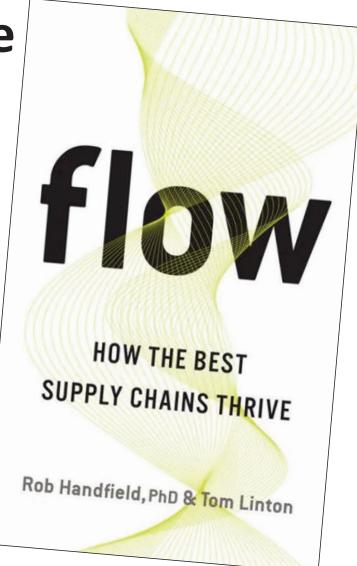
Chains Thrive

With supply chain disruptions increasingly discussed in the media and impacting our daily lives, Flow: How the Best Supply Chains Thrive by Rob Handfield and Tom Linton offers an important framework and solutions for remedying the rampant delays and bottlenecks that exist in global supply chains.

his book describes the concept of flow, which evokes physical properties that exist in nature such as the flow of electricity, the flow of materials and the flow of time. In terms of process optimisation, flow encompasses the integration of end-to-end supply chains and the movement toward relocation of global supply bases to nearshore/onshore geographies. Achieving flow is essential for organisations seeking to improve their supply chain performance in a time of increasing disruption.

This book highlights the high-level effectiveness of business strategies that use predictions based on the sequence of world events, global supply chains and data by exchanged smart technologies. By broadly applying physical laws to the global supply chain, Rob Handfield and Tom Linton explore the impact of supply chain physics on global market policies such as tariffs, factory location, pandemic response, supply base geographies and outsourcing.

The authors provide specific recommendations on what to do to improve supply chain flows and include important insights for managers with examples from companies such as Biogen, General Motors, Siemens and Flex with regard to their response to COVID-19. Flow is an important resource not only for procurement and supply chain



management professionals, but for any manager concerned with enterprise-level success.

About the authors

Rob Handfield, PhD, is the Bank of America University Distinguished Professor of Supply Chain Management at North Carolina State University and Executive Director of the Supply Chain Resource Cooperative.

Tom Linton is a globally recognised thought leader, author and former Chief Supply Chain Officer and Chief Procurement Officer. He is currently a senior advisor at McKinsey and Company, as well as an executive advisory board member at supply chain software leaders Resilinc and Project 44. •

Warehouse management:

Are you as efficient as you think you are?

By Tennille Bell, General Manager: Sales at Programmed Process Outsourcing (PPO)

Is your warehouse management system (WMS) efficient? Is it supporting your e-commerce business or only slowing it down?



hese are critical questions that companies need to ask themselves; but without proper data to support a conclusion, companies can only make assumptions. By analysing warehouse efficiencies, e-commerce businesses can determine which processes are working and which require improvement. Through exhaustive data analysis, business process outsourcing (BPO) providers can assist e-commerce businesses to see whether margins are slipping, where expenses are unnecessarily high as well as identify and rectify costly warehousing inefficiencies. Bringing on board the right BPO provider facilitates cost and performance efficiency throughout the entire warehousing process - right from supplier ordering through to product shipping - which essentially means that these exercises in streamlining the business pay for themselves.

Telltale signs of inefficiency

Without looking at data, businesses can tell whether they're efficient based on factors such as customer satisfaction levels and production targets. Red flags for inefficiency include backlogs in productivity, unmotivated or complacent staff and key performance indicators (KPIs) not being met, in addition to other warning signs such as increased customer returns. On the other hand, efficiency is seamless. There are no delays in business processes and customer complaints are few and far between

because there's simply no reason for complaint. Efficiency sounds simple, but putting it into practice is no small feat. Once a business process is designed and in place, there is rarely continuous evaluation of that process and its impact on the system as a whole. That process is used as is without adjustment or enhancement in the long term.

Always room for improvement

Rarely is a company as efficient as it would like to think and there is always room for improvement. When productivity and output lag, it is tempting to increase headcount, but this is counterintuitive. Output might increase, but so too will costs. People and businesses get stuck in their ways and only once the process breaks or becomes unavoidably problematic is it revisited. It can also be tough for companies to stay on top of technology developments and keep up with the pace of change in the world around them. Before they find themselves in a makeor-break situation, it is necessary for e-commerce companies to evaluate efficiency as a whole and seek out ways to reach that sweet spot between maximising output while minimising cost. This is where a BPO provider can make an enormous difference.

BPO with benefits

As experts in their chosen fields, BPO providers bring more than mere labour outsourcing to the table



for their e-commerce clients. Exposure to multiple clients and a varied set of demands gives a solid BPO provider extensive experience to draw from. With so much data involved in analysing WMS efficiencies, bringing in a trusted BPO provider will help the business by conducting its needs analysis with as little downtime as possible, delivering an external objective viewpoint on efficiencies that identifies areas for improvement and areas of risk, and presents proven solutions to yield the desired outcomes.

Do what you do best, outsource the rest

Which business functions can be outsourced to improve efficiency? Think about it this way: If it's not a core business function, it can be better handled by a specialist. By entrusting the warehouse management function to a BPO provider, an e-commerce company can benefit from their expertise in choosing and implementing the best technologies, processes and people to streamline operations to reduce risk and enhance output.

BPO providers operate under stringent, mutually agreed KPIs and their remuneration is dependent

on achieving these KPIs. Processes are continuously evaluated and once they're in a position where KPIs are being comfortably met, BPOs will seek out ways to further fine-tune operations to achieve even higher levels of efficiency by continuously monitoring and optimising. For the business, fixed overhead costs become flexible and it becomes easier to scale up and down as demand dictates as BPO providers anticipate and cater to fluctuations in production timeously.

Always a better way to do it

Such proactive improvement is directly linked to enhanced customer satisfaction, which comes from faster delivery and more accurate orders. Not only are returns and complaints reduced, but customer feedback reflects positive sentiment, which in turn has an impact on the company's competitive edge that brings with it increased profits. For companies still on the fence about business process outsourcing, it's important to remember one thing – if you deprive yourself of BPO and your competitors do not, all you're doing is putting yourself out of business. Can you afford to do that? •

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Intelligent transportation technologies crucial

The local transport and logistics sector is facing numerous challenges, from volatile fuel prices to a continuing recovery from COVID-19-related chaos and environmental concerns. Security is another area of serious focus for this industry and one that is pervasive across the supply chain.

ooking at our railways, the
Passenger Rail Agency of South
Africa (PRASA) announced recently
that it spends R1 billion per year to protect
its infrastructure, with the local freight
rail network being massively impacted by
theft and vandalism," states Glenn Noome,
Director at Smart Integration, a wholly owned
Ulwembu Business Services organisation.

Transnet advised last year that it too Glenn Noome had laid out R1.6 billion on security, having seen an increase of 177 percent in theft and damage on its lines, an issue that has severely affected its ability to move critical export volumes.

"And this is not the only area of transport and logistics under fire in South Africa," Noome continues. "In June this year, the South African Police Service (SAPS) presented the country's latest crime statistics, which covered the fourth quarter of the 2021/22 financial year, January to March



Glenn Noome, Director at Smart Integration.

2022. Truck hijackings saw the second biggest increase in statistics, increasing at an almost unthinkable 700 percent, quarter on quarter."

"With these sobering statistics and figures in mind, it makes sense then that transportation and logistics organisations are increasingly turning to technology to safeguard both their drivers and their cargo. Not only can these smart security solutions help with supply chain security, but they are also critical to employee health and safety, and performance improvement," he adds.

The role of smart video in transport and logistics management

According to Hikvision South Africa Solution's Director, Eric Zhang, logistics operators are making significant investments in automation and digitalisation in order to address security concerns, improve loss prevention and efficiency, and reduce unit order costs.



"A key technology for next-generation logistics management is smart video, an evolution of the cameras that companies have already been using in their warehouses, distribution centres and yards for decades," says Zhang. "While traditional cameras were used for security only, smart video solutions use AI, machine learning and other advanced technologies to enhance security measures at the same time as boosting efficiency, productivity and even worker health and safety."

The deployment of smart video solutions as part of a logistics management environment can deliver the following benefits:

An increase in site security based on perimeter protection solutions that provide clear video footage, even in zero-light environments. Radar and dome cameras can also be combined to detect any unauthorised people or vehicles entering the site and to trigger automated alerts for any suspicious movements. To further increase efficiency, remote patrols can be enhanced with AI, which enables regular security checks without having to manually review video footage. In this case, only video images that identify a potential security threat are sent to site security teams, dramatically reducing staffing requirements and costs. Fire risks can also be reduced by combining thermal cameras and smoke detectors, which can detect abrupt temperature changes that could indicate a fire and alert security teams of potential fires before any damage is done.

Improving goods and order tracking by providing the ability to create an automated, secure and fully trackable goods management process. This supports the secure flow of goods at one site (or across multiple sites) and includes solutions for accurate, secure goods scanning, tracking and delivery.

Enhancing personnel management and health and safety with AI algorithms that send alerts automatically if employees are not wearing the required protective equipment or if they get too close to dangerous machinery, for example.

Optimising vehicle and dock management with dashboards that display the status of each loading dock in real-time, which allows vehicles to load and unload quicker and help to maximise efficiency and throughput.

Improving fleet management for logistics companies. The truck fleet is one of the most important assets and protecting the safety of drivers and goods becomes a crucial topic. A mobile onboard video system is designed for easier and smarter supervision, scheduling and emergency response for logistics fleets. The system enables real-time monitoring of vehicles' interiors and their surroundings along with high-precision positioning of vehicles. The system also features a powerful software platform for live view, video playback, GIS map, device health monitoring, fuel consumption checking, goods quality monitoring, emergency alarms and more. It can help digitise the road freight industry by improving efficiencies and reducing costs.

"The use of smart video technology is critical to helping the transport and logistics industry to protect its goods, restricted areas, people and the entire transportation process from start to finish. This sector really has a lot to gain from the use of these types of solutions, and it extends beyond security and efficiency gains to include a smoother supply chain process and even traffic flow management," Zhang concludes. •



E-commerce driving new strategies in logistics and warehousing

The Warehouse Advantage webinar hosted in September highlighted the many opportunities that exist in the logistics real estate industry, including the future of logistics and all the dynamics at play.

oderated by Bruce Whitfield, the
#WarehouseAdvantage webinar included an
interesting panel discussion between Marcel
Basson (Retail Executive, Pick n Pay), Mike Benfield (CEO
of Macsteel), Gary Benatar (Chairman of Relog) and
Steven Brown (CEO of Fortress). The webinar included
discussions on why logistics real estate is so explosive
right now, the opportunities that are available for the
sector, the role warehousing plays, the longevity and
state-of-the-art innovation required and how building
surrounding infrastructure is so important for the
economy.

In summary, the panel discussed:

The progress of the new Pick n Pay super distribution centre (DC) currently under construction at Eastport Logistics Park: This 164,000m² single roof super-distribution centre would not be possible if it weren't for the partnerships that have been established between all the participants. The panel discussed the scale of the project as well as the technological and sustainability aspects of the design and construction process, and how the move from the current Longmeadow facility is expected to take place.

The role of rail: The panellists agreed that a return to rail is the best way forward for the industry. Trucks as the main transporter of goods are inefficient and expensive. They also agreed that many efficiencies could be created throughout the entire supply chain system if rail were more widely utilised. Brown said: "Transnet needs to engage more proactively with the private sector to unlock the opportunities. We cannot do it on our own and we need the government to be more flexible within the PFMA structure." Basson agreed: "Transport as part of our supply chain is by far our biggest expense. With fuel costs escalating, it needs to make economic sense that your travel distances are something that you can control because that adds cost to the product."

Benatar added: "The only way to make rail work in

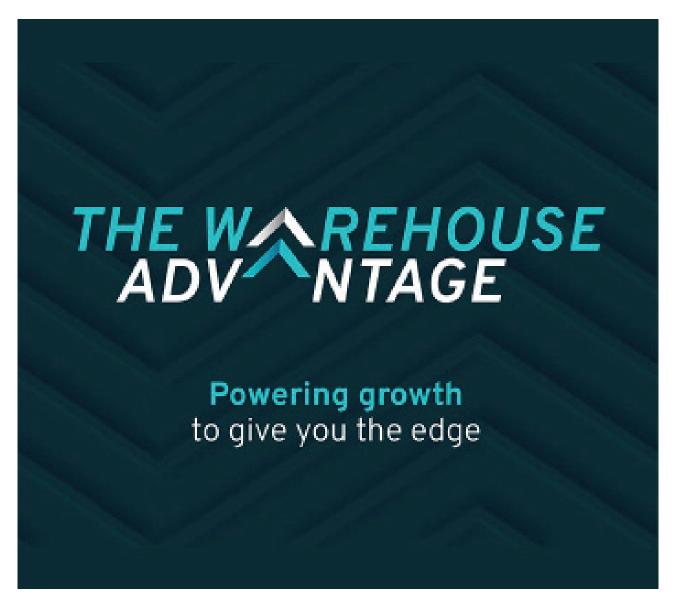
this country is to integrate the whole model and transfer of products because rail works on bulk, on inbound, on containers, on export – it doesn't work on the last mile, so you need a last mile system that integrates with rail." South Africa has its major economic hub the furthest away from any navigable water in the world. "Most of our clothing retailers have their DCs near the coast because they're bringing in containers of clothes and it's very expensive to get containers to Johannesburg. So, they store the containers in Durban and then everything is transported to other areas by road, which could be on rail, but we don't have the infrastructure and we don't have anyone driving that process," continued Benatar.

E-commerce and dark stores: Due to the massive growth of e-commerce, the logistics industry has had to adapt to cater for requirements for dark stores. A dark store is a DC/warehouse that retailers can create for an online and omni-channel solution. There is a threshold where the demand for this sector and channel will mean that retailers must look at dedicated facilities to be able to service that channel, otherwise stores get too congested. The main DCs are too large for this process and bring too much complexity into the process.

A major issue with online sales is availability, which a dark store can solve. Basson says: "A dark store doesn't need the same amount of people working in the facility as a standard warehouse and DC, and a lot of retailers go hightech in these environments. This speeds up the process, enabling us to get orders to clients in a short amount of time."

The e-commerce model is demanding in that customers want the products now and expect retailers to be efficient in this space. Retailers must be able to respond quickly and deliver accurately in a very short time frame. The only way this can be done is through the accurate availability of products.





Benatar said: "What we're seeing overseas is a development of a hybrid, so the retail store will have a multifunctional, micro-fulfilment centre behind it, which is dedicated only to picking the online orders. Together with the retail store in the front, which is customer-centric, you have an online store at the back of the store using the space and picking orders for delivery. We're going to start to see that happening in South Africa quite soon."

Plan more effectively for the future: Industry players must look to international examples and monitor trends more closely to remain competitive. Benatar believes that the industry should have a strategic master plan for logistics for the next 20 to 50 years. He cited examples of projects that he has been involved in that were planned many years in advance: "I did work in Switzerland in 2016 and was told that I needed to make sure that the warehouse is compatible with an underground transport system that

will move products into cities on magnetic levitation rails so that the last mile can be done with automatic electric vehicles and that system would be going live in 2030."

Brown elaborated: "Part of our job is identifying those locations and where the highway network is going to be built and where we think the future nodes will be. If one looks at the amount of warehousing logistics rights that are in the spatial development framework in Ekurhuleni, it's probably multiples of anything that a country our size could ever use. Everybody says there's so much flat land to build warehouses on, but you need to have the land serviced and you need to have it zoned correctly."

Brown concluded: The growth driver of logistics and e-commerce will continue for the foreseeable future. We as Fortress Real Estate are fortunate to be in the driving seat to power its growth." •



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Coega Customs Control Area

warehouse opens doors to businesses

THE COEGA Development Corporation's (CDC) Customs Control Area (CCA) warehouse is open for short-term rental. Coega's dedicated trade facilitation unit (tfu) brings together customs, warehousing and investor services and logistics into a holistic trade facilitation focal area within the Coega Special Economic Zone (SEZ). CDC is the developer and operator of the 9,003ha Coega SEZ preferred investment destination and a leading SEZ on the continent.

The Coega CCA warehouse offers general storage space for businesses across the region as well as SEZ investors that require storage and warehousing space prior to freight distribution. It has the capacity to store abnormal cargo, with an abnormal laydown area adjacent to the CCA Warehouse. The 3,600m² warehousing facility offers unpacking and repacking of cargo, cross-docking, regional deliveries and cargo storage. The facility has 1,200m² hardstand space for the storing of containers and cargo, equipped with a 3.5-ton forklift and 45-ton reach stacker, a warehouse management system used for the tracking and storing of goods, 24/7 security with full CCTV coverage and armed response, and perimeter fencing.

The added cost-saving advantage of the facility is its 1km proximity and direct access to the Deepwater Port of Ngqura, equipped to handle a combined capacity of over two million twenty-foot equivalent containers a year. The port boasts seven berths, four container terminals, two dry bulk terminals and a liquid bulk terminal. The facility



THE Coega Customs Control Area 3,600m² warehouse.

grants clients easy access to rail, road and air travel as well as integrated logistics services.

Based on its location in the heart of a fully functional 'plug and play' SEZ, the Coega CCA warehouse is built on world-class infrastructure, including roads, bulk water and sewer networks, telecommunication sleeve networks, electrical substations (HV and MV) and overhead power lines (HV and MV).

The CDC, operator of the Coega SEZ, works on the principle that trade facilitation measures are not the responsibility of a single government department, but should permeate the focus of all organisations with an interest in trade. The CDC addresses the challenge of facilitating trade through focusing on areas such as customs, environmental compliance, infrastructural services, investor services, logistics, security and spatial planning. •

Smart trailers making transport more efficient

TRUCK AND trailer body building company Serco has introduced a smart trailer system developed in partnership with South African technology specialists Ikhaya Automation. Features include real-time onboard weighing, making it possible for operators to identify axle overloads and thus prevent possible fines and delays. The smart system sends an alarm when axle limits have been exceeded, enabling adjustments to be made.

Integrating with the trailer's EBS system, it records mileage and sends alerts when the vehicle is due to be serviced. By monitoring supply air pressure to the braking



A Serco smart trailer.

system, leaks and damaged airbags can be detected, contributing to a safe and efficient running trailer.

Door opening sensors and temperature probes can be added and these integrate with auxiliary systems such as tyre pressure monitoring and GPS tracking to enhance the performance of a transporter's fleet

management system.

Ensuring a trailer is running optimally using smart technology helps reduce running costs and minimise breakdowns while improving vehicle safety. •

Inospace launches online marketplace

INOSPACE, A South African owner and operator of serviced logistics parks, has launched the Inocircle online marketplace for its clients. Built on the Inospace foundation of serviced logistics parks, the Inocircle online platform will deliver solutions to some of the most critical challenges facing its more than 1,500 tenants.

The Inocircle online platform matches tenants with vendors and offers customised customer support services. The free subscription and Product Officer at service will help tenants manage their supply and procurement demands and access industrial and logistics-related goods and services offered by various vendors at preferential rates.

"The Inocircle online platform aims to resolve business pain points and add material value to small and medium enterprises (SMEs)," says Jodi Sher, Chief Marketing and Product Officer at Inospace. She explains that pain points for their logistics tenants in their 50 parks in Cape Town and Johannesburg include transport and logistics services, warehouse racking, short-term insurance, labour advisory services and marketing. Clients will create business profiles on the Inocircle platform and can request maintenance support. They can also manage their accounts with real-time access to a business directory.



Jodi Sher, Chief Marketing Inospace.

Inocircle is launching with vendor partnerships, which include MiWay Insurance and 2Ship, a fully integrated client-facing transport management system. Through MiWay, Inocircle will provide new and existing clients with discounted non-life insurance and a range of business insurance products. Chris Rossouw, CEO of 2Ship Africa, says their online transport platform will be integrated into Inocircle and will be provided for free to Inospace clients. "Tenants will be able to find the most affordable and fastest courier and delivery

solutions for any shipment," says Rossouw.

The majority of Inospace clients are involved in logistics and delivery, and one of Inocircle's offerings is delivery fulfilment. Sher says the logistics service provides a seamless integration layer between all the major e-commerce stores and most South African local and international courier companies. "Inocircle users will be able to track deliveries, receive email updates and pay using an e-wallet, without having to open accounts with various courier companies." Additionally, through exclusive offers, Inospace will give its clients access to various support services, ideal for SMEs, including an IT help desk, tender notifications, marketing services and legal and labour advice. •

MSC to develop air cargo solution in response to market demand

MSC MEDITERRANEAN Shipping Company SA, a global leader in transportation and logistics, has started developing a new MSC Air Cargo solution in response to customer demand and as a complementary service to its container shipping solutions.

MSC Air Cargo has been under development for several months and the new solution will be available from early 2023, following the delivery of the first of four MSC-branded Boeing 777-200F aircraft that

will be operated by Atlas Air, a subsidiary of Atlas Air Worldwide Holdings, Inc.

MSC has appointed Jannie Davel, formerly of Delta Cargo, Emirates SkyCargo and DHL, to develop its air cargo business and to build the team that will implement it.

Commenting on the new initiative, MSC Chief Executive Officer Soren Toft says: "We are delighted to announce the development of MSC Air Cargo and to welcome Jannie Davel to spearhead this exciting new offering for MSC clients.

This is our first step into this market and we plan

to continue exploring various avenues to develop air cargo in a way that complements our core business of container shipping." •



MSC company wins concession to run Walvis Bay container terminal

MSC SUBSIDIARY Terminal Investment Limited (TIL) has been awarded the concession to run the Walvis Bay container terminal. Based in Geneva, Switzerland, MSC has interests in more than 60 terminals in 31 countries across five continents and handles at least 60 million TEUs a year, according to Namport CEO Andrew Kanime. "We are happy with the business case proposed by TIL and are confident that this is aligned to the fundamental objectives we have set for the concession of the New Container Terminal (NCT)," he says.

"The next stage of the process will be to commence negotiations between Namport and TIL on the Concession Agreement, focusing on the detailed operational matters, including the exact terms and conditions of the personnel to be taken over by the operator. This will culminate in the formal award of the concession, the signing of the Concession Agreement and the handover of the cargo handling operations to the private operator or concessionaire. We envisage finalising the negotiation and handover process by the first quarter of 2023."



"All objectives of the concession exercise such as increase in cargo volumes, investment commitment and employment guarantees will be solidified in the Concession Agreement, with penalties set for the non-attainment of the set and agreed performance and volume targets," he adds.

Five operators were invited to bid, with two submitting proposals, according to Kanime. He also announced that Namport had returned to an operating profit in the financial year ended in March. •

CCBSA responds to government's call to improve road safety

THIS TRANSPORT Month (October), Coca-Cola Beverages South Africa (CCBSA) strengthened its partnership with national and provincial government to invest in road safety initiatives as well as its commitment towards carbon emission reduction. CCBSA is in the middle of a five-year pilot Smart Truck Project that was initiated in 2019 to run a 44-pallet Performance-Based Standard (PBS) trailer between Bloemfontein and Upington. The PBS trailer is 27.9m long and can transport 44 pallets, compared to the conventional 30-pallet trailer.

The Smart Truck Project aims to redesign PBS trailers to minimise damage, improve safety and reduce congestion on the roads. This approach uses performance-based standards, which specify the performance required of a heavy vehicle on particular routes, bearing in mind both safety and the nature of the road infrastructure itself.



CCBSA and the Department of Transport, through the Arrive Alive campaign, have further launched a state-of-the-art simulator truck that aims to improve the competency levels of truck and bus drivers as well as other public transport drivers.

Ndanganeni Adjei, CCBSA Logistics Manager, says: "We are a major road user and to support our country's efforts for road safety, we have integrated training in all our business operations to ensure we entrench a responsible mindset amongst our drivers and operators. We are proud of our Owner Driver Scheme that has enabled us to support the growth of operators who own their businesses and to support South Africa's development mandate, where we provide previously disadvantaged groups with the economic opportunity to be part of the supply chain of a major industrial operation."

In addition, the Local Distribution Partners (LDP) programme allows the company to reach its customers in townships and rural areas. Working closely with the LDPs, CCBSA has ensured smoother delivery and enhanced customer service and has also created much-needed opportunities for entrepreneurs. "Ninety percent of LDPs are from previously disadvantaged groups. Not only do LDPs create work opportunities for themselves, but they also employ drivers, crew and warehouse staff from local communities," concludes Adjei. •

TRUWORTHS HAS signed a deal to build a new Western Cape distribution centre (DC) in Cape Town's King Air Industria, an Atterbury Property and Old Mutual Properties industrial development. The project is a joint venture between King Air Industria and Truworths Limited.

Developed by Atterbury and tailor-made for Truworths, who will lease the facility, the new building will consolidate Truworths' various Cape Town facilities under one roof. The development's 53,000m² initial phase consists of a 3,000m² office and 50,000m² warehouse and includes the option to expand to 70,000m². Designed to target an internationally recognised Excellence in Design for Greater Efficiencies (EDGE) sustainability certification, the new development is due to break ground in October 2022 and the building is due for completion in September 2023.



Emanuel Cristaudo, CFO for Truworths, comments: "As a result of business growth, we have spent some time looking to build a larger, state-of-the-art, distribution centre to accommodate our future requirements. The proximity of King Air Industria and the business park benefits have led us to conclude an agreement with Atterbury, who we also feel has a good understanding of our warehousing business needs."

Arno du Plessis, Atterbury's Development Manager for King Air Industria Cape Town, says: "Truworths is an excellent addition to King Air Industria Cape Town and we are excited to be working with this leading national and international retailer. The development rollout of King Air Industria is making excellent progress and attracting a high calibre of businesses that want to be near the airport, but also seek quality, efficient premises that support both their business and sustainability goals." •

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Pictured at the signing ceremony are (from left)
Kalpesh Patel (CEO, ETG
Logistics Business), Pavan
Nair (Business Head
Automotive Distribution,
ETGL), Laveen Gupta (Head
International Business, Force
Motors) and Prasan Firodia
(Managing Director, Force
Motors).

ETGL to distribute Force Motors model range in SA

AUTOMOTIVE MANUFACTURER Force Motors, a market leader in the manufacturing and selling of panel vans and midi-buses in India, has announced the appointment of ETG Logistics (Export Trading Group's logistics and warehousing business vertical) to distribute its range of vehicles in southern Africa. ETG, a global conglomerate with a vast African distribution footprint, is well-positioned to drive the distribution of Force Motors' brand across the continent.

A comprehensive product portfolio is planned, including the Gurkha 4x4 Off-roader, Traveller midi-bus, panel van and ambulance and Kargo King pick-up range. While the Gurkha is aimed at serious off-roading enthusiasts, the Traveller midi-bus is expected to be popular with mini- and midi-bus taxi operators who are looking for affordable people mover solutions. The first vehicles on South African roads can be expected during the first quarter of 2023.

"We are extremely pleased to have ETG Logistics on board as our distributor for South Africa and neighbouring countries. We believe that we have the right products to cater to different customer segments and look forward to emerging as a strong brand in multiple African markets," says Prasan Firodia, Managing Director, Force Motors.

Kalpesh Patel, CEO, ETG Logistics Business, adds: "We are very excited to partner with Force Motors and South Africa will be the first market to which we will offer mobility solutions for customers in the people-moving, freight and SUV spaces. We are also in advanced discussions for the East African markets and Kenya will be the first country we target in that region." •



World's first hydrogen tug boat put to the test

CONSTRUCTION OF the world's first hydrogen-powered tug boat, *Hydrotug 1*, has been completed in Spain. The tugboat arrived in Belgium last week where its hydrogen system will be completed and trials will be run at the Port of Ostend before it is delivered for service by the end of this year. *Maritime Executive* reports that the goal is to have *Hydrotug 1* fully operational at the Port of Antwerp during the first quarter of 2023.

The tug was built at the Armón Shipyards in Navia, Spain, where it was launched on 16 May in a demonstration of project partnership between CMB Tech and the Port of Antwerp-Bruges. CMB Tech, which says it is taking a pioneering role in the transition of ships to environmentally friendly fuel, also launched the vessel *Hydrocat 48* earlier this year. The hydrogen-powered tug is the latest in its series of projects demonstrating hydrogen-powered propulsion.

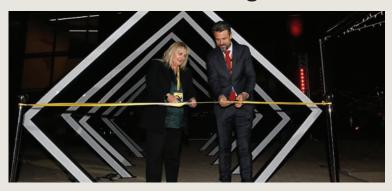


According to port officials, $Hydrotug\ 1$ can store 415kg of compressed hydrogen in six racks installed on the deck. It is estimated that this eliminates emissions equivalent to 350 cars. In addition, each hydrogen refuelling of $Hydrotug\ 1$ saves the total emissions of one car for one year.

Two BeHydro V12 dual-fuel medium-speed engines, which can run on both hydrogen and traditional fuel, power the tug. It is the first in the world to be powered by combustion engines that burn hydrogen in combination with diesel. The vessel has a power of 5,500hp.

Ostend was selected as the port of choice for the final outfitting and testing of the new tugboat because the vessel uses the hydrogen facilities of CMB TECH's *Hydrocat 48*, which operates from the port. •

New facility and HO for DHL Global Forwarding



DHL GLOBAL Forwarding has inaugurated a new transhipment hub and head office in Johannesburg. Located in the Sky Park Industrial Estate with easy access to OR Tambo International Airport, the new airport hub is ready to support Africa's growing life sciences and health care (LSH) industry with safe, reliable and efficient consolidation and transport solutions. Both the warehouse and head office meet the highest sustainability standards and will be almost entirely powered by green electricity from photovoltaic panels.

Amadou Diallo, CEO of DHL Global Forwarding Middle East & Africa, says: "We are proud that this new facility was built to the highest standards of sustainability and energy efficiency in line with DHL Global Forwarding's goal of reaching net-zero logistics-related emissions by 2050."

The new R127 million facility includes offices and a $10,000\text{m}^2$ warehouse. It will serve as a hub for transport, logistics and warehouse solutions, as well as international freight expertise for different industries. This includes a strong focus on Africa's LSH sector, which, with an expected annual growth rate of 6.3 percent and anticipated revenue of EUR 7.1 billion by 2023, is one of the booming industries in the country. To serve the needs of the LSH sector, the site has been designed to meet the DHL Global GxP Pharma standards and the highest Transported Asset Protection Association (TAPA) security standards.

Clement Blanc, CEO of DHL Global Forwarding for South Africa (SA) & Sub-Saharan Africa (SSA), says: "The strategic location of our new facility at OR Tambo will enable us to enhance our service offering to clients. We are excited to be able to transport both time- and temperature-sensitive pharmaceutical goods and health products, among other services. I am confident in our ability to assist our customers in developing and expanding their businesses and continuing to aid the socio-economic growth of South Africa and the greater sub-Saharan African region."

The new facility will also create skilled jobs in Johannesburg. DHL Global Forwarding has expanded its total workforce in South Africa by 11 percent since 2021. The company also has a strong commitment to supporting and driving the participation of SMEs in the economy and ensuring that they have a place in global supply chains. •

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