The Future of

RETAIL IN AFRICA

BY DR SALOMÉ TEUTEBERG





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CONTENTS

INTRODUCTION	
LITERATURE REVIEW	
TECHNOLOGICAL CHANGES IN THE RETAIL SECTOR	
WHAT IS THE REALITY IN THE DEVELOPING WORLD?	
REVIEW OF CHANGES VISIBLE IN THE RETAIL SECTOR IN AFRICA: INTRODUCTION AND UPTAKE OF NEW TECHNOLOGIES	
AFRICA'S INTERNET PENETRATION	
URBANISATION	
MOBILE MONEY AND E-COMMERCE	
LOOK TO THE FUTURE: POTENTIAL CHANGES AND CHALLENGES IN THE RETAIL SECTOR IN AFRICA	
GIG ECONOMY AND FLEXIBILITY	
CASE STUDY OF CHALLENGES IN THREE AFRICAN COUNTRIES	
ZAMBIA	
SOUTH AFRICA	
KENYA	
INSIGHTS	
POTENTIAL UNION RESPONSES TO IDENTIFIED CHANGES	
NEGOTIATIONS	
LAWS	
TECHNOLOGY	
BIBLIOGRAPHY	2

INTRODUCTION

Globally, the retail sector is changing at a rapid pace. E-commerce is becoming more and more prevalent. Retailers are moving towards automated stores in which customers do not have to make use of any till facilities or encounter any employees. High-tech automated convenience stores are becoming more frequent across Chinese cities such as Beijing and Shanghai (Chitrakorn, 2018).

These kinds of changes result in retailers needing less floor space and becoming less reliant on in-store employees. Such a decreased reliance on human labour will not only have cost-saving effects, but also avoid the demands of organised labour such as providing workers with adequate social protection.

However, the debates arguing that jobs are at risk of being replaced or computerised is to a large extent based on studies conducted in Europe and Northern America (Arntz, Gregory and Zierahn, 2016). There are some who argue that this is not the norm. Services such as automated stores and online shopping are associated with middle to high-level income groups. When we are considering Africa, it is well known that affordability and literacy levels differ to that of the global North.

Instead of relying on automation, which is often expensive and reliant on infrastructure (like electricity and internet access) employers are seeking more flexible workforces in the advent of the fourth industrial revolution. The steps employers take to free themselves of a permanent workforce are experienced by retail workers on the ground. Unions are constantly faced with employers whose main objective is to terminate all permanent contracts that provide employees with any form of social security. Retail work in Africa is starting to take on a more flexible form in which workers are not protected and jobs are not secured (Omomowo, 2011), Inextricably linked to the future of retail is the future of cities and the rate of urbanisation in Africa. It is important to mention this trend in light

of its effects on the retail sector, and this study will draw on the theory surrounding "smart" vs "just" cities.

Within the Shoprite, Massmart and Pick n Pay Alliances (large retailers in Africa), to which the LRS provides strategic research support, it has become evident that these companies are moving towards a more flexible workforce. Massmart is also bringing in the position of "general assistant" in which employees need to be able to multi-task and conduct various jobs at the same time. Employees are not adequately compensated for performing multiple tasks which, in turns, drain productivity (Massmart Alliance Meeting, 2017).

The current international COVID-19 crisis has brought to light the importance of retail workers. Along with workers like nurses and doctors being categorised as essential, retail workers, especially those in food retail, have been at the forefront of the crisis, providing an essential service. This study will discuss this current crisis in light of changes in this sector in more detail, specifically aiming to provide recommendations on taking advantage of this unique opportunity.

This study will look into changes already implemented in the retail sector in Africa, as well as identifying potential changes to the retail sector in Africa. The study will not only focus on the visible technological changes (like automation) but also the less visible changes like staff scheduling and the introduction of more flexible workers. This will be limited to three retail networks (Massmart, Shoprite and Pick n Pay).



The main areas of enquiry include:

- A brief reflection on what the sector looks like
- What has been happening in the recent past; recent trends and developments
- Challenges facing the sector (e.g. Trade issues, global pandemic)
- Challenges facing labour in this context

LITERATURE REVIEW

TECHNOLOGICAL CHANGES IN THE RETAIL SECTOR

The Fourth Industrial Revolution will see humans increasingly involved in the design of jobs, but less in the actual performance thereof. App developers, cloud computing specialists, data scientists, social media managers and sustainability managers are but to name a few of the occupations seen as synonymous to the new wave of technology (Baldassari and Roux, 2017).

However, Osborne & Frey (2013) posit that it is not only blue collar jobs that are at risk of automation — white collar jobs like bookkeeping, accounting and auditing are also at risk. Jobs with predictable and repetitive elements are likely to have these parts of the job automated. Jobs at risk include cashiers, clerks, and mining and maintenance workers, as many elements of these jobs are both predictable and repetitive.

The COVID-19 pandemic has highlighted and, in some cases, accelerated the technological changes in the retail sector, specifically the increasing dependence on e-commerce, or online shopping. In May of 2020 US-based e-commerce giant Amazon doubled their total sales. A report by Mastercard has revealed e-commerce sales as being up by 92.7% in May. In the US alone, consumers spent over USD 53 billion on e-commerce (Retail Dive, 2020). International clothing retailer Zara is set to close as many as 1,200 stores and focus its efforts on e-commerce (Retail Dive,

2020). Zara's parent company, Inditex, plans to pour EUR 1 billion into its online business in the next two years.

Amazon uses billions of data points to develop its online presence. The company has developed "anticipatory shopping software". Based on a buyer's previous browsing preferences, the software will assess whether the shopper is likely to buy a product and if so, start the shipping process even before the customer has pressed the "buy" button.

Another observed change in the retail sector is the move towards automated stores. In China, high-tech automated convenience stores are becoming more prevalent (Chitrakorn, 2018). These have very few, if any, visible staff. A mobile app with a unique ID enables shopping and payment. Amazon has launched something similar in the form of Amazon Go. When a customer leaves a store their credit card is charged directly, which means there is no line for checkout (Kestenbaum, 2017). It is

however important to note the real level of uptake of these technologies. We are yet to see large scale adoption of such stores, even in the UK and America. In South Africa, Pick n Pay rolled out automated tellers to one store in 2016, and has yet to roll this out to any other stores.

As retailers make the move to e-commerce and store automation, they require less floor space. Researchers have posited that retailers might only keep smaller stores as showrooms, and the remaining trade would take place through online platforms from central distribution centres. There will also be less reliance on actual employees (Singh, 2008 and Omarjee, 2017). These technologies, including digital price displays and robots restocking shelves, decrease the reliance on human labour and, although these technologies are expensive, the decrease in human labour will save costs and avoid the demands of organised labour like providing workers with adequate social protection.

WHAT IS THE REALITY IN THE DEVELOPING WORLD?

Most of the information mentioned so far is based on studies performed in the Global North (Arntz, Gregory and Zierahn, 2016). We argue that this is not the norm for the developing world, and we note the lack of available scholarly research on this subject in Africa. Arntz et al. (2016) conducted a study in which they compared different countries in the Organisation for Economic Co-operation and Development (OECD). The countries included in the study, however, are high-income economies with a very high Human Development Index (HDI), and are regarded as developed countries.

Still, some of the findings are applicable to the developing world: Arntz et al (2016:4) specifically mention how important the differences in workplace organisation, previous investment in automation technologies and "differences in the education of workers across countries" are in determining the level of job automation in a country.

This illustrates that specifically job automation and technology uptake is context-dependent. This means that, when considering Africa, we know that the context is extremely different from that of the global North, meaning the uptake of technology will be different. Technologies like online shopping are slow to be taken up in Africa. In a recent study (Times Live, May 2020), 64% of shoppers in South Africa said that they still preferred shopping in a physical store. The head of the Department of E-Commerce and Digital Economy at the United Nations Conference on Trade and Development (UNCTAD), Torbiörn Fredriksson, said that in Europe around 60% to 80% of the population will buy things online. In Africa, less than 5% of the population is currently buying things online (DW, 2019).

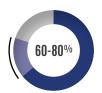
Despite being the largest online retailer in America, with plans to expand to other markets, Amazon has failed to expand its e-commerce offering to Africa. In fact, it seems that Amazon has no plans to bring e-commerce to Africa at all. Barriers to entry include the high cost of broadband and intermittent Wi-Fi, the unreliability of delivery companies and postal systems, and literacy rates. Jumia, hailed as "Africa's Amazon", has had some issues of its own. In April 2019, Jumia was listed on the New York Stock Exchange. Now, over a year later, the stock price has plummeted. Amidst allegations of fraud, Jumia has had to close operations in Rwanda, Tanzania and Cameroon. This illustrates the disparity between retail technologies in a developed country context.

Technology is associated with high costs, and automated stores and online shopping is associated with a higher income bracket than what is common in Africa. The Living Standards Measure (LSM) is a tool used in South Africa to group people according to their living standards. It divides the population into 10 LSM groups, 10 (highest) to 1 (lowest). The majority of Shoprite's buyers are located in the mid-range LSM. There is a case to be made that a large percentage of the buying power in developing countries is located in an LSM bracket that does not necessarily support automation processes.

This could change as the cost of automation decreases. However, automation is reliant on infrastructure – like good



64% of shoppers in South Africa said that they still preferred shopping in a physical store.



60% to 80% of Europeans shop online



In Africa, less than 5% of the population currently shop online



internet connections and stable electricity supply. We can regard automation as a slow process that is expensive and needs to overcome economic, societal and legal hurdles which are often more pronounced in a developing context.

Do retailers in Africa want to create the same experience as retailers in the global North? In the African context, it may be argued that price is valued more than convenience.

Researchers have argued that automation can lead to increased economic disparity. Daniel le Roux (2018) makes an argument for automation being a "driver of economic inequality". He writes that, while automation can increase efficiency, decrease human costs and help companies avoid wage increase demands and protests, recent economic trends in the developed world suggest that it may also be a key driver of economic inequality. The sentiment is not necessarily anti-technology. Increasingly smart technologies exacerbate economic inequality by "devaluing low-skilled labour and hollowing out the middle class" (Le Roux, 2018). Marchant et al (2014) warn that, if the technological transition is handled poorly, "the widespread displacement of workers by technology could result in rapidly expanding economic divergence between rich and poor, economic poverty

and social unrest for growing numbers of dislocated workers, backlashes against technology and social institutions, and economic and social decline".

On the other hand, these researchers also add some hope. They note that if the technological revolution is properly managed, "the use of technology to replace mundane, lackluster, repetitive, dangerous or strenuous labor, could free us to live more enjoyable, meaningful and leisurely lives" (Marchant et al, 2014). Kestenbaum (2017) echoes this sentiment by writing that, although this technology is important, it will remain only as a tool in which the connection between a consumer and a product is made. It is not the answer to all the challenges existing in the sector.

This literature review revealed that it is vital to take context into account when determining the effect of technology on labour. While extreme job losses are often exaggerated, it is anticipated that routine or predictable tasks are more susceptible to change or indeed complete elimination than jobs that are not routine. This makes the retail sector more vulnerable to automation, as many tasks are both repetitive and predictable. It is predicted that while the jobs themselves may not entirely vanish, the jobs will be "redefined". If a job radically changes, a worker may indeed not have the new skill set that is required.

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Technology is associated with high costs, and automated stores and online shopping is associated with a higher income bracket than what is common in Africa.

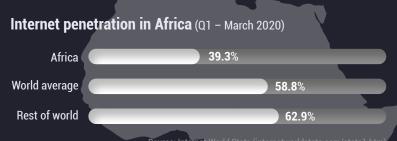
Introduction and uptake of new technologies

REVIEW OF CHANGES VISIBLE IN THE RETAIL SECTOR IN AFRICA

AFRICA'S INTERNET PENETRATION

Some of the biggest changes visible in the African retail landscape relate to e-commerce and mobile money.

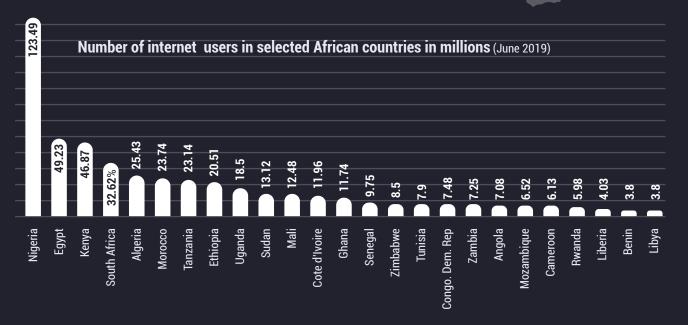
In July 2019, over 525 million people in Africa used the internet. Usage varies across countries: in Kenya it was 83%; in South Africa, 56%; and in Nigeria, 60%. Africa lags behind every other continent in the proportion of internet users. The graph to the right shows internet penetration in Africa compared to the world average, as well as the rest of the world (excluding Africa). The rest of the world has internet penetration of 62.9%, while in Africa internet penetration is 39.3% (Internet World Stats, 2020).



Source: Internet World Stats (internetworldstats.com/stats1.htm) 526,710,313 estimated internet users in Africa in March 31, 2020 and 4,585,578,718 internet users in all the world in March, 2020.

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Statista (2019) reports the below graph on the number of internet users per country in Africa. Nigeria by far has the most users, at over 123 million. Egypt, Kenya and South Africa follow at 49 million, 46 million and 36 million users respectively. Zimbabwe is reported to have around 8 million users. Internet penetration and usage will inform retailers' decisions in each country regarding digitalisation – if few consumers use the internet regularly, would it be profitable to invest in online shopping or other internet-dependent automation processes? This also reiterates the fact that automation is context dependent – what might work in one country in Africa might not work in another.



URBANISATION

It is worth mentioning that Africa has the fastest rate of urbanisation in the world, and that by 2030 the 18 largest cities in Africa will have combined spending power of USD 1.3 trillion (Compliant IA, 2019). Africa has as many cities with over one million inhabitants as North America.

Agyenim-Boateng et al of McKinsey (2015) note the importance of the young population of these cities:

"Fifty-three percent of income earners in Africa are between 16 and 34 years old —an age group that tends to be more aware of and eager to try new products. These consumers will contribute to more than \$400 billion in total consumption growth in the next decade."

These larger cities with more spending power and an eagerness from young city dwellers to spend, mean big opportunities for retailers. In Nigeria, wholesale and retail is the third largest contributor to GDP. The number of stores in Kenya has grown by 54% from 2014 to 2019. Africa's emerging middle class (currently around 27% of Africa's population is considered middle class) is looking to spend more (Pandey, 2018).

A lot of this spending currently takes place in the informal market, but especially in East Africa there is a shift to more formal retail. This opens up opportunities for companies like Walmart and The Carrefour Group to expand into the continent. In 2010, Walmart bought a 51% stake in Massmart. In 2018, The Carrefour Group partnered with African e-commerce company Jumia to offer Carrefour-branded products on their e-commerce website (Compliant IA, 2019).

However, despite the large middle class, most of the people in cities in Africa live in informal settlements. Work is often informal and precarious. Formal work (like retail work) is becoming more informal, increasing the precariousness of the workforce in cities (the section on gig economy and flexibility deals with this further).

Trade unions are reaching out to workers in cities in order to gain new members, but organising informal workers into a traditional union brings some challenges. Not only do these workers' contracts (if they have a contract at all) not fit into traditional structures, but the workers often don't work for only one employer.

Unions can and must play a role in shaping these new structures. Urbanisation in this context means bigger retailers and more workers, but it also means these retailers have more opportunity to exploit workers. More workers means that the union can increase membership, especially by including informal workers in new and innovative ways. Unions can use this opportunity to ensure that workers in informal positions are included in decision making. According to ITUC Africa, trade unions play a major role in development and must continue to do so within these rapidly urbanising cities. Unions must continue work to uphold freedom of association and collective bargaining rights, as well as promoting decent work.



53% of income earners in Africa are between 16 and 34 years old

Source: Agyenim-Boateng et al (2015)



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MOBILE MONEY AND E-COMMERCE

Mobile money (like M-Pesa) has seen large scale adoption in Africa. After being in operation for a decade, more than 50% of the GDP of Kenya goes through M-Pesa (DW, 2019). In the Ivory Coast, USD 30 million goes through mobile money every day.

In terms of e-commerce, sales in Europe grew to over 600 billion Euros in 2019. Americans spent about 36% of their shopping budget online, and the rest in-store. With millions of internet users in Africa, the expectation is that e-commerce will grow. The McKinsey Global Institute predicts that by 2025 e-commerce will be worth USD 75 billion in Africa's leading economies.

Despite these predictions, globally online purchases only account for around 10% of sales. In Africa, this number is much lower. There are many challenges facing the online retail industry including the lack of national street address systems in many African countries, the expense of last mile delivery and the fact that most Africans are unbanked. In 2019, the global average on e-commerce purchases was USD 499. In South Africa, where e-commerce platforms like Takealot are doing really well, average e-commerce spend is only USD 109. The below graph shows some African countries compared to the global average (Kazeem, 2020).

Most of the ecommerce sites in Africa are marketplaces that invite third party sellers. The one site that focuses on UK and US sellers is Nigeria-based Mall for Africa, which affords Africans the opportunity to buy from UK and US-based sellers like Amazon and eBay. This is no surprise given the high internet penetration of Nigeria. Mall for Africa gets around the last mile delivery hurdle by offering pick-up locations instead of home delivery (Kaplan, 2018).

There are obstacles, but there are also opportunities for retailers, especially during the global pandemic which is

Average amount spent on e-commerce purchases (2019)



Source: Quartz, data from HootSuite

binding people to their homes more and more. Shoprite's Checkers has launched "Sixty60" in South Africa, an app that allows users to order groceries to be delivered within 60 minutes. This has however come under strain during the pandemic, and Shoprite has struggled to keep up.

Both Pick n Pay and Woolworths have made online grocery shopping available to its customers. During the international COVID-19 pandemic, South Africa has seen a rise in e-commerce platforms, and especially on-demand delivery services. One notable company is OneCart, an on-demand grocery delivery service. It has partnered with Pick n Pay, Food Lovers' Market, Dis-chem, Clicks, Jacksons and most recently Makro. OneCart solves the issue of creating effective online platforms – OneCart shops from brick-and-mortar stores (Burgers, 2020).

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LOOK TO THE FUTURE

POTENTIAL CHANGES AND CHALLENGES IN THE RETAIL SECTOR IN AFRICA

Automation comes at a price. In Africa, data is expensive and coverage is intermittent. While in countries like Zambia and Mozambique, 1GB of data costs between USD 1.97 and USD 2.70, data in eSwatini and Zimbabwe can go up as high as USD 21.39 per 1GB of data (Gilbert, 2019). In South Africa, 1GB of data costs around USD 6.81. However, this cost has come down significantly since 2014, when prices were over USD 14. This could point to future developments in terms of data costs on the continent.

Researchers at RMB have found that Africa's "lack of efficient infrastructure is one of the highest hurdles to business in Africa" (Griesel, 2020). The study specifically included, amongst other kinds of infrastructure, tangible infrastructure including information and communications technology (ICT) and digitalisation. The study continued to show that while infrastructure development over the past ten years had focused on ICT, now the focus is more on electricity generation (South Africa being a key example) and road-infrastructure improvements.

These two factors - data costs and infrastructure - act as significant hurdles when it comes to automation and digitalisation. The third factor to this is the cost of labour in Africa. It is well known that labour costs in Africa are very low compared to the global North. The below graph shows entry level wages for full time employees at Shoprite across the continent. The lowest wage is in Malawi, at around USD 79 per month, while the highest is South Africa at USD 306 per month. When compared to countries in the Global North, these figures seem very low. In the United Kingdom, the minimum wage is set at USD 1,788 (2020), with similar rates in France. In Spain, the minimum wage is around USD 1,173. In America in 2017, the average monthly wage of a retail worker was around USD 2,000 (Capterra, 2017).

While labour costs remain much lower than automation costs, companies might choose not to do away with its workforce in favour of automation.



Deloitte (2019) makes some predictions surrounding trends in retail. They predict that retailers will lower their amount of stores and rather focus on making those better. With fewer stores, the retailer will be able to focus on meeting the needs of their customers in-store. While this may be true for smaller brands, large brands like Shoprite rely on being visible in rural communities. Brands like Woolworths and Pick n Pay have focused on decreasing the amount of large stores (hypermarkets) and instead have increased the number of smaller stores (like the convenience stores attached to petrol stations).



Minimum wages in the Global North:

\$1,788 United Kingdom (2020)

\$1,173 Spain (2020)

\$2,000 America (2017)

Source: Capterra, 2017.



Although the aforementioned barriers to entry may deter African retailers from turning to large scale automation like automated tills or completely cashless environments, retailers are looking to reduce labour cost by means of technology.

Smith (2016, 387) writes the following:

"All on-demand mobile services keep sales costs low by using an app for ordering, payment, and feedback. But the biggest part of this rebalancing is labour costs. As an aggregation and distribution channel for people providing personal services, a company with an Uber-All business model creates scale that has been difficult to realise heretofore. In addition, by engaging people to provide personal services on demand, companies can lower the overhead costs associated with full-time employees by taking advantage of broader shifts in labour markets."

What we can infer from this quote is that companies who are dependent on large workforces will move towards lowering labour costs. A good explanation of this is the "gig economy". The gig economy refers to a labour market made up of "freelance, short-term, on-demand work" (Booth, 2019). This includes workers on platforms like Uber, Airbnb and Fiverr. The concept is not new. Domestic workers, as an example, have been working on a "gig" basis for decades. What has changed, however, is

the introduction of technology. Technology enables "widespread, flexible and on-demand work opportunities" (Booth, 2019). In America and in Europe, over 64 million people supplement their income with gig work, while in South Africa temporary employment rose from 2.6 million in 2017 to 3.9 million in 2018 (Statistics SA).

Companies across the world are taking advantage of this trend. Ingrid Booth of Investec (2019) takes note of the benefits of gig work in a country like South Africa with unemployment challenges:

"For a country like SA that's facing massive unemployment challenges, the growth of the gig economy – be it direct or via Uber, Airbnb or any of the many other shared labour platforms – carries with it many benefits, providing job opportunities while boosting productivity. Individuals can bolster their earning potential and realise their passion with side gigs, while businesses can tap into the sought-after skills they require, without the need to permanently employ staff."

However, Booth (2019) also points out that this kind of work makes workers more vulnerable to exploitation. These workers are often not protected and don't have any of the benefits of permanent employment like sick leave, medical aid, life insurance and retirement plans. In most countries only employees are protected by legislation: "Independent contractors are not offered such protection and their recourse is limited to what is contained in their service contracts" (Business Tech, 2017).

In 2017, the South African Commission for Conciliation, Mediation and Arbitration (CCMA) ruled that seven Uber drivers who had been removed from the platform were "not independent contractors but must be considered employees". This entitles these workers to protection under the Labour Relations Act and the Basic Conditions of Employment Act. This ruling was very important in terms of the use of gig workers in South Africa, and legislation should follow that protects workers in more precarious forms of work. There are however few countries that have explicitly added protections for these kinds of workers into law.

This has not stopped companies from "casualising" work. Work is starting to take on a more flexible form in which workers

are not protected and jobs are not secured (Omomowo, 2011). Companies often make use of outsourcing as a way to rid themselves of less-skilled workers and to have that work done at a lower cost.

The FES-TUCC, along with UNI Africa, brings together a group of union representatives from across Africa every year from large retailers Shoprite, Massmart and Pick n Pay. Within these meetings, there is evidence that these companies are moving towards a more flexible workforce. Massmart specifically has brought in the position of "general assistant." This has meant that employees need to be able to multi-task and conduct various jobs at the same time.

Throughout these network meetings, the following complaints relating to temporary workers and the conditions under which they are employed have been heard:

- "Key-time employees who are employed in Shoprite are not treated like employees nor according to our labour laws."
- "The company survives through key-time employees."
- "We need to be assisted with international campaigns against the employment status of key-time employees and/or to eliminate precarious work."

These are worrying signs of things to come. Retailers like Pick n Pay, Shoprite and Massmart may not be harnessing the power of automated tills or robots that restock shelves, but it is clear that these companies are making moves to get away from a permanent workforce and move towards flexibility – or indeed create a system of "gig workers" who are at the mercy of the employer.

Employers are thus seeking more flexible workforces in the advent of the fourth industrial revolution, and workers in Africa might indeed be more vulnerable to this change. The steps employers are willing to take to free themselves from a permanent guaranteed workforce is in line with what retail workers are experiencing on the ground. Unions are constantly faced with employers whose main objective is to terminate all permanent contracts that provide employees with any form of social security.



CASE STUDY

CHALLENGES IN THREE AFRICAN COUNTRIES

For the purposes of this research study, we focused on three African countries: Kenya, Zambia and South Africa. These three countries play an integral role on the continent, as well as in the FES-TUCC UNI AFRICA network alliance meetings.

We sent structured questionnaires to respondents in all three countries. The questions were:

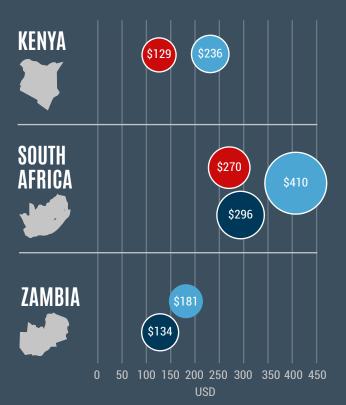
- Do you see any changes in your day-to-day life working in retail that are due to new technologies?
- What are these technologies? Do they make retail work harder or easier? How are they affecting workers?
- 3. What has changed about your job in the last 5 to 10 years?
- 4. How have you seen retail work change over the last 5 to 10 years?
- 5. What are you scared of changing in the work environment?
- 6. Has staff scheduling affected retail workers in your country?
- 7. Has automation affected retail workers in your country?

The diagram below shows entry-level wages per country and retailer in USD in 2019. It is important to note these wages, as wage levels will play a role in determining how costly automation would be. The amounts are based on reported numbers from the unions, and converted to USD using exchange rates at the time.

The highest paid worker in this instance is the worker at Masswarehouse (Massmart) in South Africa at USD 410 per month.

Pick n Pay workers in Zambia are the lowest paid at USD 134 per month. South Africa in general seems to have higher wages for all three companies.

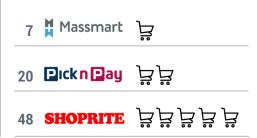
Entry-level wages per country and retailer in USD in 2019







Number of stores in Zambia



In the 30 years since the liberalisation of the Zambian economy, the retail sector has moved away from stateowned stores towards supermarket chain stores.

The wholesale and retail of food in Zambia is now dominated by these foreign regional supermarket chains (Shand, 2017). Zambia's open trade environment and loosening tax policies has opened up the country for more foreign business.

Despite this dominance, Shand (2017) estimates that up to "70% of households source their food from informal channels through traditional small stalls, informal shops and kiosks, street vendors as well as marketplaces" (emphasis added). In 2017, 54.4% of Zambia's population were classified as "poor", and 40% of these people live in what is classified as "extreme poverty".

The high rate of urbanisation in Africa, including the expansion of formal retail spaces, will affect this number. Lusaka ranks among Africa's top Urban 50 markets, and the Zambian middle class is growing. Shand (2017) mentions a household survey where 50% of respondents said they visited a supermarket once a month. This suggests a pattern of bulk-buying from supermarkets, while the informal economy fulfils other food needs.

Traditionally Zambia's economic strength lies in copper mining and agriculture, but the country is starting to diversify. The growing middle class has meant growth in consumer-driven sectors (Insurance chat, 2018): "... in 2016, 39% of Zambian household spend went to food and soft drinks, ahead of second-placed housing and utilities spend (17.9%)".

For the purposes of this study, I spoke to the Regional Chairperson of the National Union of Commercial and Industrial Workers (NUCIW) in Zambia, Vasco Mainza.

Do you see any changes in your day-to-day life working in retail that are due to new technologies?

Yes, so many changes have taken place in the last few years.

What are these technologies? Do they make retail work harder or easier? How are they affecting workers?

- My Zone booth: an employee has the chance to learn anything pertaining to every department in the company via this platform, electronically.
- Ordering System: Depending on the rate of sales, the system can suggest orders on its own for some suppliers.
- WorkForce Management system (WFM): Employees are now using their fingers to clock in and out whenever they report for work or knock off. So convenient, and biometric. It has lessened unnecessary work that management had to do before.
- Stocktaking System: Our current system is so involved when it comes to counting and fast in getting to know the stocktake results – the results come out almost immediately.

What has changed about your job in the last 5 to 10 years?

A lot of things have changed and simplified. An example is the hourly sales: the system shows how much money you make per hour on a daily basis. So it can help you plan and for example show you which time of day you need more cashiers. In other words, the technology enables Shoprite to keep improving systems. Initially we had the Operating Better Stores system (OBS), now we have what we call COR3. This has come along with elements

of Biometric, SAP, and other related technologies.

How have you seen retail work change over the last 5 to 10 years?

There is an increase in dependency of merchandisers (workers employed by suppliers). They do a lot of work in Shoprite stores, yet their conditions of service are compromised as they do not have permanent contracts from their employers. Conversely, Shoprite permanent employees' numbers keep on dwindling.

What are you scared of changing in the work environment?

Whether we like it or not, Technology is slowly taking over much of the work done by people.

Has staff scheduling affected retail workers in your country?

Flexi timers have been hit hard in terms of scheduling. They are paid according to the hours they work – more hours translates into more money. They are no longer working abnormal hours because the system tells them when they should be needed for work.

Has automation affected retail workers in your country?

To begin with, the effects of automation are so devastating to the retail employees and any other sector we may think of. Currently in Zambia we have no shops with facilities of self-service. However, Shoprite introduced online buying after the pandemic of COVID-19. And so far it looks like it is working well. A good number of people/customers is taking advantage of this arrangement under the new normal. In other sectors, such as banks, it is evident that the effects of automation are quite dangerous.

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Traditionally
Zambia's economic
strength lies in
copper mining and
agriculture, but the
country is starting
to diversify.
The growing
middle class has
meant growth in
consumer-driven
sectors [...].



Number of stores in South Africa

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The South African retail market is dominated by big retailers including Shoprite, Spar, Woolworths, Pick n Pay and Massmart. The retail and wholesale sector is the biggest provider of formal employment in the country.

In the third guarter of 2019, the sector employed around 3.4 million people. In terms of jobs, the sector is volatile. Since the 2009 recession, the sector has grown and shed thousands of jobs each vear (Buthelezi, 2020). Both Edcon and Massmart have started mass store closures, resulting in the loss of thousands of retail jobs in 2020.

Slow economic growth has affected the retail sector, with few opportunities for local retailers to expand in a very saturated market. The economic outlook for South Africa is not favourable, and while retail has steadily been growing over the last 10 years, more recently consumer spending has been negatively impacted.

By international standards, South Africa's online retail sector is small. The industry

has seen growth over the last few years, but in 2019 Africa's retail trade was still below 2%.

The international COVID-19 outbreak has impacted this number (Bekker, 2020):

"[...] it is estimated that online retail sales grew by around 40% during lockdown. International forecasts suggest that year-on-year growth may be in the region of 100%. A key impact of the crisis has been the huge increase in e-commerce adoption among businesses and consumers who otherwise may not have entered the online market for some time. There has been huge growth at many of the omnichannel retailers, although online gains have been partly offset by declines in consumer spending in physical stores and the wider retail sector."



The economic outlook for South Africa is not favourable, and while retail has steadily been growing over the last 10 years, more recently consumer spending has been negatively impacted.

For the purposes of this study I spoke to Joyfull Mnguni, National Chairperson of Makro Company Council, from the South African Commercial, Catering and Allied Workers Union (SACCAWU):

Do you see any changes in your dayto-day life working in retail that are due to new technologies?

Yes, I do see changes since there are these new technologies being introduced in our space, and now one must adapt to it.

What are these technologies? Do they make retail work harder or easier? How are they affecting workers?

Meetings through Zoom: it requires us as workers to have smart phones, tablets, data and more so that we can have internet access. It is hard for ordinary workers, as many of them were not brought up in that [online] space from school level.

What has changed about your job in the last 5 to 10 years?

Not much has changed, but now training is now done via Zoom and Virtual screens, where you cannot engage as well as you would in face-to-face engagements.

How have you seen retail work change over the last 5 to 10 years?

Retail has changed in terms of how we do things. For example the clocking system (biometrics) that can automatically tell employers when a worker has been late for work four times — an automatic message then gets sent to HR for disciplinary measures.

How have retail workers been positively affected by these changes?

What has been positive about it, is that it has created some new skills that workers must start learning to save their jobs.

How have retail workers been negatively affected by these changes?

Retail work has changed in such a way that employers want to minimise the use of cashiers by introducing the mobile cashier scanners and self-service scanner. Most customers are adapting to the introduction of online businesses, and the number of walking in customers are dropping off. This means employers have to downsize or restructure their businesses (through section 189 of LRA.)

What are you scared of changing in the work environment?

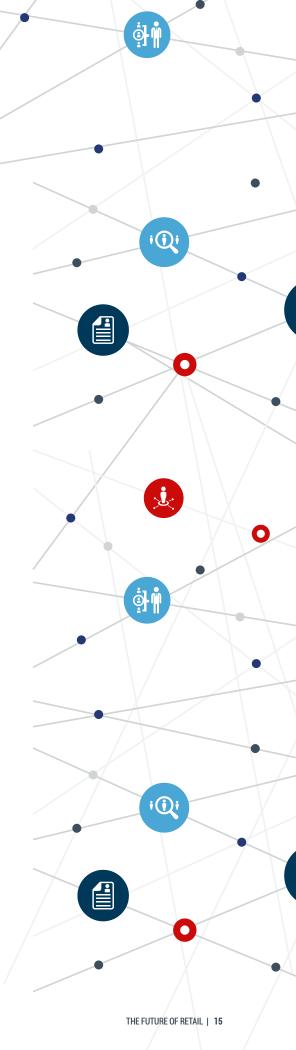
What scares me is that, if workers do not adapt to the new system of using technology in the working environment, they can find themselves without a job at a later stage of their lives (because the worker may have dedicated his life to that working environment). Another concern is that the rate of unemployment in South Africa is very high.

Has staff scheduling affected retail workers?

Yes, it has affected workers. For instance, if a worker is sick and can't come to work, it becomes a "no work no pay" situation – even with a doctor's letter. The same applies for family funerals and rituals – a worker can only attend on days off. If you are scheduled to work, you have to work.

Has automation affected retail workers?

Yes, it has. You can already see a bloodbath of jobs in retail affecting the working-class: the likes of Edgars, Masscash (Dion Wired), Massdiscounters (Game), Cambridge and now Masswarehouse (Makro SA) have been issued with lots of restructuring and retrenchments.





Until recently the Kenyan retail sector was dominated by two family-owned retail chains, Nakumatt and Tusky's. Mismanagement, increased competition and bad decisions led to the downfall of Nakumatt, which closed all operations in 2017. This left a void in the market that other retailers have rushed to fill.

The main players are Tusky's and Naivas, making up approximately 46% of the market in Nairobi (Asoko Insight, 2020).

French supermarket chain Carrefour moved into Kenya in 2016 and dominates the high-end market. Shoprite entered the market in 2018, and has planned on expanding rapidly, focusing mainly on shopping malls in affluent neighbourhoods in Nairobi. However, Shoprite announced the closure of one Nairobi store due to COVID-19. Massmart currently has three stores in Kenya (under their brand Game).

Over 80% of Kenyans are employed in the informal sector. Only around 0.6% of the 48 million Kenyans earn what can be considered "middle class wages" (White & Rees, 2019). The average formally employed Kenyan earns around USD 785 per month, and about half of Kenyan households earn less than 100 USD per month. One in three Kenyans lives "below the international poverty line of less than \$1.90 per day" (White & Rees, 2019). Despite vast increases in urbanisation, only around 26% of the population lives in urban centres.

Despite these clear challenges, Tuskys is aggressively expanding, and Naivas in 2019 was the country's biggest online retail supermarket. Experts venture that local retailers still account for more than 85% of supermarket sales (White & Rees, 2019). This does not bode well for international retailers trying to enter and expand into what is a relatively small middle class market.

Number of stores in Kenya

Massmart 🗦

0 Pickn Pay

2 SHOPRITE

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For the purpose of this study, I spoke to **Mike Oranga**, Assistant Secretary General of the Kenyan Union of Commercial, Food and Allied Workers (KUCFAW):

Do you see any changes in your day-to-day life working in retail that are due to new technologies?

Yes.

What are these technologies? Do they make retail work harder or easier? How are they affecting workers?

- Social media marketing: availing goods and services to e-commerce platforms.
- Fast customer service at retail stores, like automated Points of Sale/tills
- Innovation on Space: Having a food court in their spaces, leading to more customer flow.
- Easy and efficient record-keeping and

market prediction: helps keep accurate and reliable data and also makes available enough merchandise.

- Online Shopping and Pick up: less physical contact with customers.
- Increased security: Security cameras, for example, discourages shoplifters from stealing.
- New modes of payment: cashless transactions.

What has changed about your job in the last 5 to 10 years?

There is reduced workload due to new market players and competition.

How have you seen retail work change over the last 5 to 10 years?

Employers are moving towards outsourcing

and part-time work.

There is reduced customer flow due to new market players and competition.

Basket value has gone up.

What are you scared of changing in the work environment?

Loss of employment due to new technologies.

Has staff scheduling affected retail workers in your country?

Yes – the introduction of shifts that stretch into the night and complete night shifts has affected family dynamics.

Has automation affected retail workers in your country?

Yes.



The three participants of the questionnaire specifically mentioned that the number of permanent staff at the retailers is changing. More workers are employed as "flexi-timers", which results in a more flexible workforce for the company.

As managers can optimise staff scheduling based on data (e.g. Which are the peak times when more cashiers are needed?), they prefer flexi-timers who will work at short notice and whose hours can be moved around at will. The worker becomes almost like a "gig worker" for the company, with less benefits and odd working hours. This includes night shifts and working later into the night due to longer operating hours.

Another issue mentioned is that workers may struggle to adapt to new technologies, e.g. Meetings with management via Zoom. Older workers, or workers who have not been exposed to technology may find themselves struggling to keep up, and the company offers limited training. Workers mention being scared that if they don't adapt they will be left behind, and unemployed. In this same theme, unions are having meetings with management at times online. This affects how bargaining is done, especially when experiencing network related roadblocks.

Clocking in and out is another part of the system that is being automated – often by means of biometrics. If, for example, a worker is late four times, the system sends an automatic message to Human Resources to discipline the worker. One of the issues arising from this is that there is no personal contact: the system cannot understand that the transport was late or that the worker experienced family issues.

Kenya specifically mentioned a positive effect of automation with regards to record-keeping and market prediction. When the supply and demand system is automated, it can predict when to order the right products for the store. This minimises wastage. Another positive is the introduction of online shopping, especially during the time of COVID-19, where contactless shopping is safer for both customers and workers. However, the longer term effects on brick-andmortar stores remain to be seen.

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The worker becomes almost like a "gig worker" for the company, with less benefits and odd working hours.

POTENTIAL UNION RESPONSES TO IDENTIFIED CHANGES

NEGOTIATIONS

It is clear that retailers are moving towards a more flexible workforce. There are negatives to this: Tavis (2017: 8) speaks to one of the risks posed by a "loosely connected network of part-time workers". It is said that workers subcontracted into any company will be disengaged from the actual organisation, its vision and objective. Many businesses rely on elements of teamwork to advance and promote the company.

This desire would not exist within a group of neglected contract workers and could result in negative long-term consequences such as losing institutional knowledge and damaging the reputation of an employer. Unfortunately, these negative consequences are yet to be seen, especially in a sector such as retail in which employees are regarded as replaceable. As a result, unions and workers will have to be cautious of the tactics employers will use to ensure flexibility within their workforce.

UNITE HERE (a union based in the US) in the hotel, food service, laundry, warehouse, and casino gaming industries sets a good example for bargaining for the changing world of work. In June 2019, the union managed to include protections from technological change in its contracts covering workers at the Las Vegas properties of MGM Resorts and Caesars Entertainment.

These clauses include training for workers where jobs are created or modified by technology, which ensures that the workers share in these potential productivity gains. The contracts also provide for the company to try to find jobs for displaced workers. The union's most vital achievement was the clause that the union would get 180 days' warning of technological deployments. This means that the company has to let the union know well in advance what their new technologies entail, which gives the union time to respond and negotiate around these new technologies.

This, in turn, means that the company feels it can "move forward" and adapt to the times while giving the union time to understand how the changes might affect workers.

Within bargaining processes, union's negotiators should think about ensuring clauses such as the following:

- Guaranteed minimum working hours
- Job guarantees for the length of the collective bargaining agreement (CBA)
- Restrictions on staff dismissals
- Restrictions on subcontracting
- Protection of non-permanent workers
- Education and training (including re-skilling to meet new skill demands)

LAWS

If these predicted job losses come to fruition, the modernisation of social safety nets will become a priority. This process can easily become politicised, but it is worth noting that each prior technological revolution has come with corresponding changes to the social contract.

Labour laws have historically adjusted as technology and society progressed. The United States is a good example:

1842 - Right to strike

1924 - Abolish child labour

1935 - 40-hour work week

1962, 1974 - Trade adjustment assistance

1964 - Pay discrimination prohibited

1970 - Health and safety laws

21st century - The 21st century could bring forth laws surrouding AI and automation adjustment assistance.

There is an urgent need for consideration of national debates/campaign development to ensure the required skills transitions and/ or relevant compensation measures. The following issues are key:

Compensatory measures (guaranteed basic income and wealth redistribution)

Legislation protecting the rights of workers (realistic minimum levels of pay and benefits, restoring a decent work-life balance and removing the impediments to union organising)

Training demands/programmes: ensuring sufficient (re-)training especially for low qualified workers

From the report, it is clear that there are some big changes already visible in the sector. These changes should, however, accommodate adequate social protection, compensation measures and/or training and (re)skilling opportunities for workers. Bargaining is a pivotal tool in ensuring workers receive protection, especially via broader support and awareness campaigns. Capacity building is crucial to equip negotiators with bargaining in complex environments. Employers will increasingly try to by-pass any responsibilities in the changing nature of work. Should this become the norm, the tendency of capitalism to exacerbate income inequality will increase.

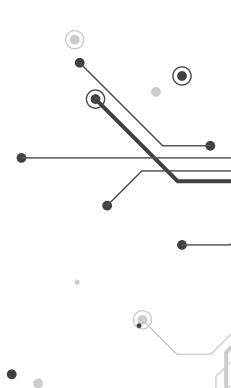
TECHNOLOGY

Importantly, unions should look into ways to utilise technology to enhance their own position. These are some examples of how unions have overcome the hurdles of organising in the changing world of work:

- German trade union, IG Metall, provides a virtual place named faircrowdwork, where freelance workers (and specifically workers in digital platforms) are allowed to share views and organise themselves.
- U.K. Broadcasting, Entertainment, Communications and Theatre Union (BECTU) represents both employees and freelance workers in the sector and has signed an agreement with an employers' organisation, the Producers' Alliance for Cinema and Television (PACT), which regulates labor relations in the U.K. filmmaking industry.
- Freelancers Union (US) has recently signed an agreement with Uber. The union is in charge of advising the company on how to create portable benefits for its drivers.

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German trade union, IG Metall, provides a virtual place named faircrowdwork, where freelance workers are allowed to share views and organise themselves.



BIBLIOGRAPHY

- Agyenim-Boateng, Y., Benson-Armer, R, and Russo, B. (2015) Winning in Africa's consumer market | McKinsey. [online] Available at: https://www.mckinsey.com/industries/consumer-packaged-goods/our-insights/winning-in-africas-consumer-market# [Accessed 9 Aug. 2020].
- Arntz, M., Gregory, T. and Zierahn, U. 2016. "The Risk of Automation for Jobs in OECD Countries: A Comparative Analysis", OECD Social, Employment and Migration Working Papers, No. 189, OECD Publishing, Paris. http://dx.doi.org/10.1787/5jlz9h56dvq7-en
- Bekker, D., 2020. Online Retail In South Africa: South Africa. [online] Whoownswhom.co.za. Available at: https://www.whoownswhom.co.za/store/info/4867?segment=Retail+%26+Wholesale [Accessed 1 September 2020].
- Booth, I. (2019). Rocking the gig economy | Investec. [online] Available at: https://www.investec.com/en_za/fo-cus/economy/rocking-the-gig-economy.html.20].
- Burgers, L. (2020). #OnShelf: On-demand delivery is the future of retail. [online] Available at: https://retailingafrica.com/branding/on-shelf-branding/onshelf-on-demand-delivery-is-the-future-of-retail/ [Accessed 9 Aug. 2020].
- Business Tech (2017). What is the gig economy and could it work in South Africa? [online] Available at: https://businesstech.co.za/news/business/208831/what-is-the-gig-economy-and-could-it-work-in-south-africa/[Accessed 4 Aug. 2020].
- Buthelezi, L., 2020. As SA Retailers Struggle, Other African Markets Start To Shine | Fin24. [online] Fin24. Available at: https://www.news24.com/fin24/companies/retail/as-sa-retailers-struggle-other-african-markets-start-to-shine-20200119-2 [Accessed 1 September 2020].
- Campbell, J. (2019) Last Month, Over Half-a-Billion Africans Accessed the Internet. [online] Available at: https://www.cfr.org/blog/last-month-over-half-billion-africans-accessed-internet#:~:text=There%20were%20 525%20million%20internet [Accessed 4 Aug. 2020].
- Chitrakorn, K. 2018. 5 Technologies Transforming Retail in 2018. https://www.businessoffashion.com/articles/fashion-tech/5-technologies-transforming-retail Date of Access: 8 March 2018.
- Compliant IA (2019). Retail in Africa: Interesting Facts and Emerging Trends. [online] Retail Operations. Available at: https://blog.compliantia.com/2019/11/06/retail-in-africa-interesting-facts-and-emerging-trends/[Accessed 9 Aug. 2020].
- Deloitte South Africa. 2020. Retail Trends 2019. [online] Available at: https://www2.deloitte.com/za/en/pages/consumer-business/articles/retails-trends-2019.html [Accessed 1 September 2020].
- DW (2019). Digitalization in Africa: "We aren't thinking any more in the conventional way" | DW | 05.04.2019. [online] DW.COM. Available at: https://www.dw.com/en/digitalization-in-africa-we-arent-think-ing-any-more-in-the-conventional-way/a-48089948.
- DW (2019.). Online shopping in Africa: Somewhere between smartphones and paper catalogues | DW | 14.12.2019. [online] Available at: https://www.dw.com/en/online-shopping-in-africa-somewhere-between-smartphones-and-paper-catalogues/a-51662266 [Accessed 31 Jul. 2020].
- DW. (2019). Digitalization in Africa: "We aren't thinking any more in the conventional way" | DW | 05.04.2019. [online] DW.COM. Available at: https://www.dw.com/en/digitalization-in-africa-we-arent-think-ing-any-more-in-the-conventional-way/a-48089948 [Accessed 4 Aug. 2020].
- Gilbert, P. 2019. Connecting Africa The Most Expensive Data Prices in Africa. [online] Available at: http://www.connectingafrica.com/author.asp?section_id=761&doc_id=756372 [Accessed 3 Aug. 2020].
- Green, T. (2016). Where's the Amazon for Africa? [online] MEF. Available at: https://mobileecosystemforum.com/2016/11/24/wheres-the-amazon-for-africa/ [Accessed 31 Jul. 2020].
- Griesel, J. (n.d.). Infrastructure in Africa: The growth essential. [online] www.rmb.co.za. Available at: https://www.rmb.co.za/news/infrastructure-in-africa-the-growth-essential [Accessed 3 Aug. 20

- Internet World Stats (2020). Africa Internet Users, 2020 Population and Facebook Statistics. [online] Available at: https://www.internetworldstats.com/stats1.htm.
- Kaplan, M. (2018). Africa: An Emerging Ecommerce Market with Many Challenges. [online] Practical Ecommerce. Available at: https://www.practicalecommerce.com/africa-emerging-ecommerce-market-many-challenges.
- Kazeem, Y. (2020). It's been a tumultuous, loss-making year since the billion-dollar IPO of Jumia, "Africa's Amazon." [online] Quartz Africa. Available at: https://qz.com/africa/1834923/jumia-africas-amazons-huge-losses-since-a-billion-dollar-ipo/.
- Kazeem, Y. (2020). Online spending in Africa shows just how much work e-commerce companies still have to do. [online] Quartz Africa. Available at: https://qz.com/africa/1797489/how-much-do-africans-spend-on-e-commerce/ [Accessed 7 Aug. 2020].
- Kestenbaum. R. 2017. Where Retail Technology Needs To Go Now. https://www.forbes.com/sites/richardkesten-baum/2017/12/10/where-retail-technology-needs-to-go-now/#4fb4d3875fc6 Date of Access: 8 March 2018.
- Le Roux, D.B. (2018). Many South African jobs could soon be automated, and the country isn't prepared. [online] The Conversation. Available at: https://theconversation.com/many-south-african-jobs-could-soon-be-automated-and-the-country-isnt-prepared-99689 [Accessed 31 Jul. 2020].
- Marchant, G.E.; Stevens, Y.A.; and Hennessy, J.M. 2014. Technology, Unemployment & Policy Options: Navigating the Transition to a Better World. Journal of Evolution and Technology Vol. 24 Issue 1 February 2014 pgs 26-44
- Omarjee, L. 2017. The future of retail: Robots to replace people? https://www.fin24.com/Companies/Retail/the-future-of-retail-robots-to-replace-people-20170109
- Omomowo, K. E. 2011. The changing nature of work: The creation of a 'working poor' population in post-apartheid South Africa. Development Southern Africa Vol. 28, No. 5, December 2011.
- Panday, E. (2018). Africa's growing middle class drives prosperity. [online] Available at: https://www.axios.com/africas-growing-middle-class-is-a-source-of-pros-1516452641-9f257787-0cd6-403c-b7dc-954f078e24f6. html.
- Retail Dive. (2020). E-commerce sales spiked nearly 93% in May. [online] Available at: https://www.retaildive.com/news/e-commerce-sales-spiked-nearly-93-in-may/579725/ [Accessed 31 Jul. 2020].
- Retail Dive. (2020). Zara owner Inditex to close as many as 1,200 stores. [online] Available at: https://www.retail-dive.com/news/zara-owner-inditex-to-close-as-many-as-1200-stores/579637/ [Accessed 31 Jul. 2020].
- Shand, Nina. 2017. Wholesale And Retail Of Food In Zambia :: Zambia. [online] Available at: https://www.whoownswhom.co.za/store/info/4530?segment=Wholesale+and+Retail+of+Food+in+Zambia)> [Accessed 1 September 2020].
- Singh, S. 2008. Impact of Internet and E-Commerce on the Labour Market. Indian Journal of Industrial Relations, Vol. 43, No. 4 (Apr., 2008), pp. 633-644. Published by: Shri Ram Centre for Industrial Relations and Human Resources. Stable URL: http://www.jstor.org/stable/27768158
- Smith, J. W. 2016. The Uber-All Economy of the Future. The Independent Review, v. 20, n. 3, Winter 2016, ISSN 1086-1653, Copyright© 2016, pp. 383-390. Volume 20, Number 3, Winter 2016
- Statista (2019). Africa number of internet users by country 2019. [online] Available at: https://www.statista.com/statistics/505883/number-of-internet-users-in-african-countries/.
- Tavis, A. 2017. How the Internet of People Will Change the Future of Work. PEOPLE + STRATEGY. VOLUME 40 | ISSUE 3 | SUMMER 2017
- TimesLIVE. (2020). South Africans opt for "get in, get out ASAP" approach to shopping. [online] Available at: https://www.timeslive.co.za/news/south-africa/2020-07-14-south-africans-opt-for-get-in-get-out-asapapproach-to-shopping/ [Accessed 31 Jul. 2020].



