

# **AUTOMATED IMPERIALISM, EXPANSIONIST DREAMS:**

Exploring Digital Extractivism in Africa

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**AUTOMATED IMPERIALISM, EXPANSIONIST DREAMS:  
Exploring Digital Extractivism in Africa**

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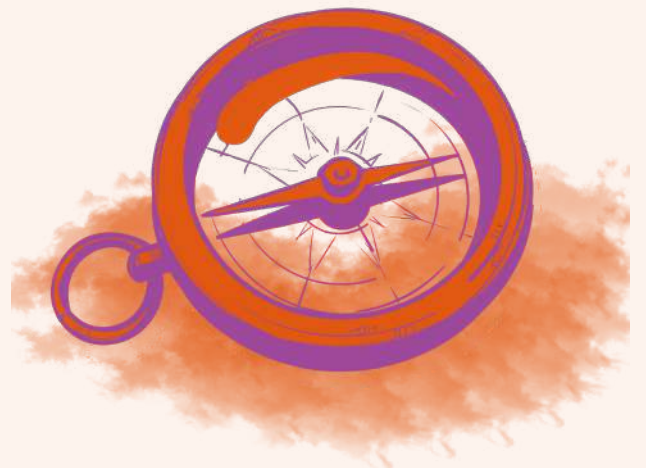
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# Table of Content

Executive Summary .....	4
Historical Context .....	5
What is Digital Extractivism? .....	6
Digital Extractivism in our Current Content .....	7
Digital Labour .....	10
Illicit Financial Flows .....	14
Data Extraction .....	18
Natural Resource Mining .....	22
Infrastructure Monopolies .....	25
Digital Lending .....	29
Funding Structures .....	33
Beta Testing .....	37
Platform Governance .....	41
Further Research .....	45
Recommendations .....	46
Key Terminology Explained .....	48
Endnotes .....	50
References .....	51



# Executive Summary

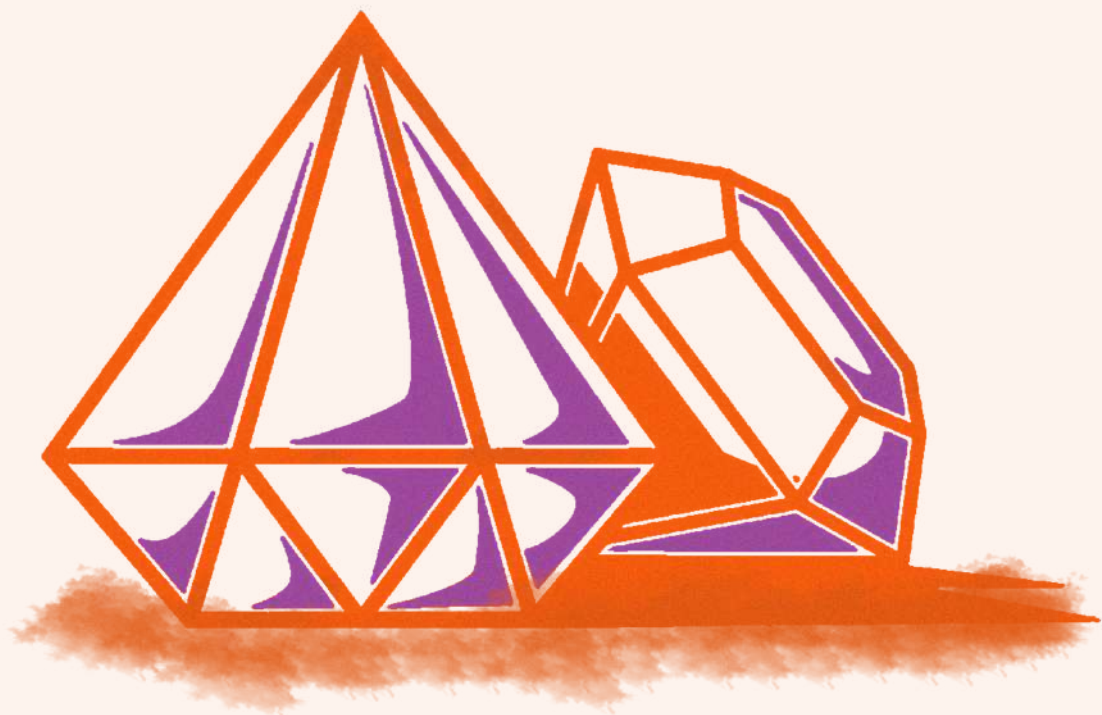
Extractivism is a longstanding colonial mechanism that involves the accumulation and transfer of wealth through the appropriation and extraction of natural resources from colonized countries in Africa, Asia, and the Americas to the colonizing countries. Historically, these natural resources included agricultural products, minerals, oil, etc. These resources were sourced through brutal labour practices, degradation of local ecosystems, and the destruction of existing social bonds and society. Whereas historically, under industrial capitalism, extraction occurred 'through ownership and direct control over sites of production,' contemporary capitalism enables global corporations to develop robust systems of wealth accumulation through cultural, political, and economic hegemony (Ye et al., 2020). Today, digital extractivism promotes neoliberal policies of privatization and commodification, in partnership with governments, much to the detriment of the local economies and populations.

This paper seeks to identify the key methods of digital extractivism that take place in the African continent, showcase case studies of how extraction happens, and provide existing or potential policy responses to these practices. The paper concludes with brief recommendations for citizens, governments, civil society, technology companies, and regional/continental bodies on addressing this outflow of resources, data, and labour. This paper is intended to promote conversation among practitioners and researchers to develop appropriate policies that support digital sovereignty in a deliberate and constructive manner.



# Historical Context

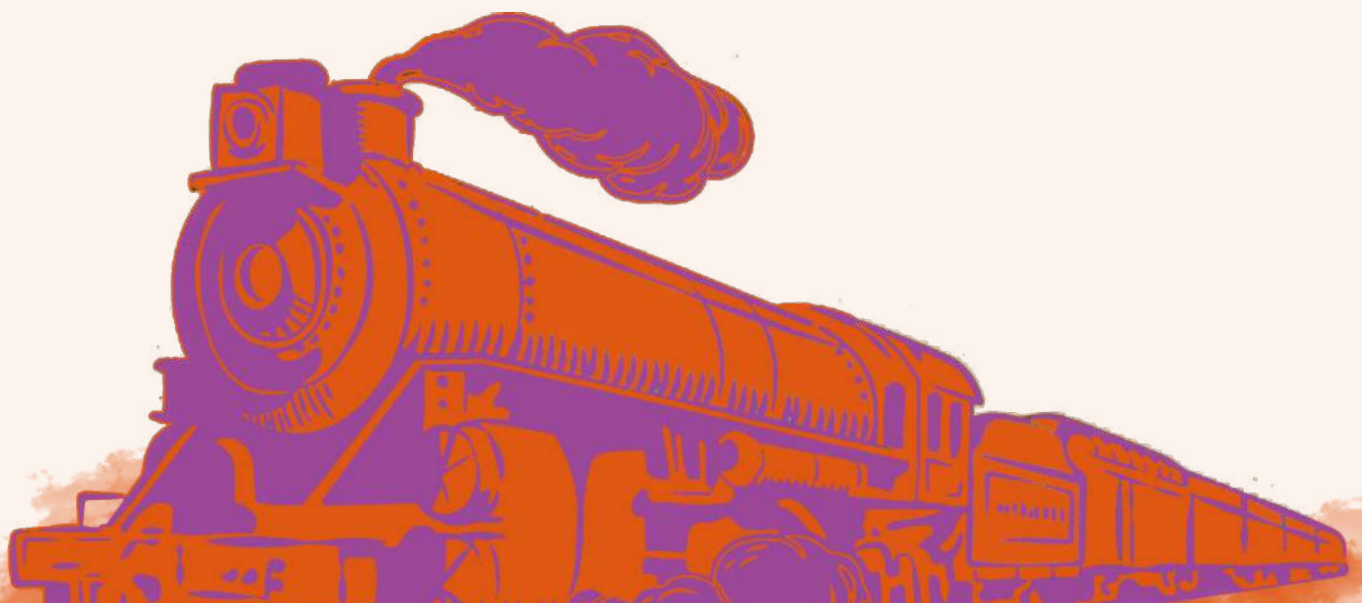
Extractivism in colonial Africa was strongly connected to two major economic breakthroughs for European imperialists, i.e. the mineral and cash crop revolutions, with the discovery of diamonds in South Africa in 1867, and agricultural commodity production across West and Central Africa in the mid-1800s, respectively (Roessler, 2020). These institutions, structures and practices prioritized extraction of primary commodities to supply to external markets in Europe, far away from sources and local consumers. This extractivism has been an ongoing cause of underdevelopment in many African countries based on the legacies of economic inequality, fragmentation of community structures, exploitative and violent labour and land practices such as that on rubber plantations in Belgian Congo or in the mines in South Africa. Trade policies at the time focused on the bulk export of raw commodities which inhibited the development of local processing, manufacturing, and economic differentiation (Hirschman 1977), and ensured that areas without arable land or profitable mines were purposefully neglected and underdeveloped to serve as a source of cheap labour. These practices ensured an ongoing lack of capital, skilled labour, domestic market linkages etc. and introduced extreme spatial inequalities, communal strife, weak institutions, enduring poverty and neo-extractive practices that persist till today.



# What is Digital Extractivism?

Digital Extractivism is a form of exploitation based on the virtualization or digitization of commodities and services through a borderless digital capitalism that perpetuates pre-existing colonial practices of value grabbing and wealth accumulation. In this case, the resources may be mineral (eg. Coltan), labour, data and, even culture. In the case of data, Big Tech such as Facebook, Google, Amazon and Uber, have been particularly complicit. Several similar technological giants are on the rise in countries such as China and India. These large companies have access to voluminous troves of structured and unstructured data and are well-resourced financially and technologically to process and profit from this information. The African market exists as an untapped source of data. Masked behind neoliberal terminologies such as “equality” and “democracy” (Solon, 2017), these companies are able to set up software and hardware infrastructure across the continent, bypassing weak legislation and minimal competition to extract, analyse and store and financial benefit from this data

Termed Data Colonialism or Digital Colonialism, this practice could be deemed similar to the colonial approach of setting up infrastructures such as railways and ports, not for the benefit of the indigenous market, but for the purpose of extracting raw materials to return to Europe or North America (Graham et al, 2015). It can also be theorized that similar to how infrastructure built during the colonial era involved minimal care and involvement of local population, today’s digital infrastructure is structured through poor content moderation, ad monopolies and a host of capitalist tools to ensure the commodification of people while maximizing profit by optimising the bottomline.



# Digital Extractivism in our Current Content

Nine methods of digital extractivism were identified for the purposes of this paper. Following an extensive desk review of academic literature, thought pieces, blog posts and in-depth interviews with key experts, these methods are explained below, including case studies as well as existing or potential policy responses by different stakeholders.

<u>Digital Labour</u> 1	<u>Illicit Financial Flows</u> 2	<u>Data Extraction</u> 3
<u>Natural Resource Mining</u> 4	<u>Infrastructure Monopolies</u> 5	<u>Digital Lending</u> 6
<u>Funding Structures</u> 7	<u>Beta Testing</u> 8	<u>Platform Governance</u> 9

Method of Extraction	Description	Case Study
<b>Digital Labour</b>	Technology companies hire digital workers from locations, such as within Africa, where hiring labour is cheaper or where labour laws might be weaker in a practice referred to as labour arbitrage. Despite the benefits of providing employment opportunities in a continent with high unemployment rates, digital labour can be extractive due to unequal power dynamics, lack of labour protection within African countries and the lack of transparency on how the work of the digital labourers will be eventually used.	Business Process Outsourcing in South Africa
<b>Illicit Financial Flows</b>	Illicit financial flows (IFFs) is a term used to describe the various means through which the payment of taxes are minimised or reduced. For example, tax avoidance is a means by which value is extracted from the continent when little or no tax on revenue made from sales in African nations, in spite of the exploitation or use of African resources, is paid. The OECD values annual tax avoidance losses in Africa to be worth up to \$50 to 80 billion, an amount exceeding the value of development aid given to Africa yearly (OECD, 2021).	Uber's Champions League of Tax Avoidance
<b>Data Extraction</b>	Technology companies have exploited minimal data protection legislation and local competition to set up widespread software communication solutions for the African market to collect user data. This data is in the form of consumer identities, consumer behaviors, beliefs, and other consumer-related information and is used primarily for profit by selling insights to political players or third-party advertisers.	Facebook's Free Basics
<b>Natural Resource Mining</b>	Dating back to the colonial era, African economies have been largely dependent on extractivism as an economic model. States give up vast amounts of minerals, labour and raw materials to be exported to the global North and in exchange import heavily, and almost exclusively, from the same global North powers. The drive for profit from vital minerals required for the manufacture of many of our electronic devices has fuelled the largest conflict in modern African history (Totolo, 2009).	Columbite-Tantalite mining in the Democratic Republic of Congo

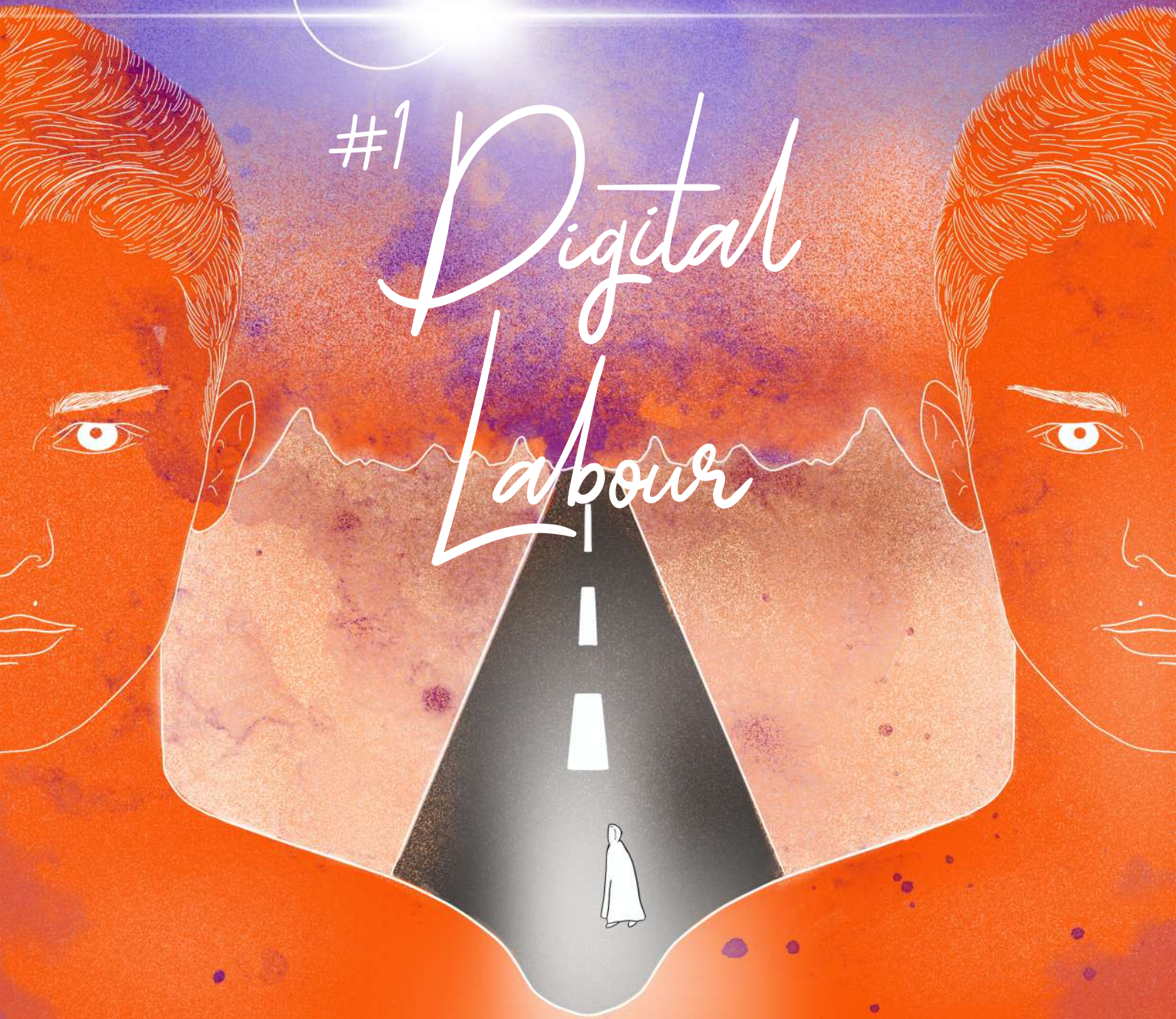


<b>Infrastructure Monopolies</b>	Much of Africa's digital infrastructure has been built and is dependent on foreign technology companies, leading to several forms of foreign domination.	Chinese-led Infrastructure Development and Global Surveillance Capitalism
<b>Digital Lending</b>	While digital loans were once seen as a way of providing financing options to previously unbanked populations, digital lenders combine extractive financial approaches, data extractivism and social shaming practices to trap and extort users.	Digital Loan Apps
<b>Funding Structures</b>	Venture capitalists (VCs) have been accused of severe bias in funding offered to African startups. For example, a white founder is 47,000% more likely to be funded in Kenya than in the US (Madowo, 2020).	Jumia
<b>Beta Testing</b>	Despite the importance of beta testing, it has often been conducted unethically on vulnerable populations who often lack informed consent and have no bargaining power against the companies deploying the technologies. The African continent has a long history of being used as a testing ground as former colonies were sites for experimentation with new forms of medical and scientific innovations (Mohammed et al, 2020).	Testing of Biometric Technologies on Refugee Populations
<b>Platform Governance</b>	Concerns are rising over the bias in both platform guidelines and the automated AI application of platform rules set by foreign technology companies, particularly in how they discriminate against black and brown persons, marginalized groups, dissenting voices within certain countries etc.	Content Moderation in Local Languages



#1

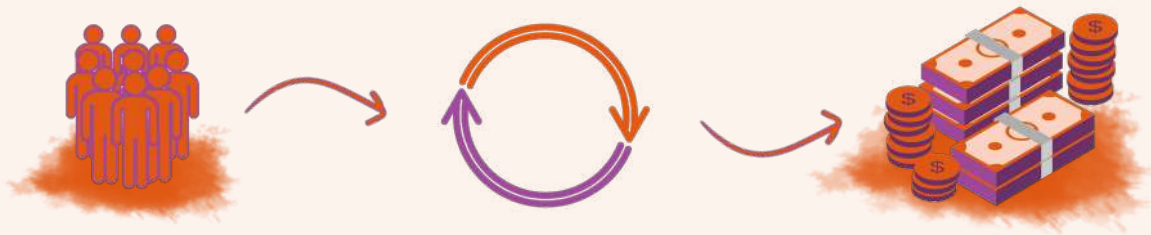
# Digital Labour



# Digital Labour

Digital labour is defined as paid activities undertaken through digital labour markets. Here, digital labour markets are platforms where jobs can be outsourced and offshored to people in different parts of the world.

In Africa, workers participate in digital work by outsourcing work for themselves through platforms like Fiverr and Upwork, or from outsourcing firms like Sama (formerly known as Samasource) and Amazon Mechanical Turk offering microwork opportunities like content moderation, transcription, fact checking and data labelling. Typically, companies hire digital workers from locations where hiring labour is cheaper or where labour laws might be weaker in a practice referred to as labour arbitrage. Africa is seen as a competitive market for outsourcing digital labour because of the large young and educated labour force. The rise in internet connectivity on the continent also means that more workers are able to participate in the digital economy. Most importantly, however, is that this market has become more lucrative due to rising labour costs in traditional outsourcing markets like India and the Philippines (Pierce, 2021).



Despite the benefits of providing employment opportunities in a continent with high unemployment rates, digital labour can be extractive. First, power dynamics between platforms and workers make it hard for workers to negotiate for better pay. Digital workers in Africa often fear asking for better pay as platforms opt to go for cheaper labour. As a result, workers accept the low pay and poor work conditions because it is better than unemployment.

Second, workers are not aware of the impact and scale of the work they are involved in, making it easier for digital platforms to lowball them. While African workers work on projects seeking to improve and develop cutting edge digital technologies like autonomous vehicles, machine learning systems, next-generation search engines and recommendation systems, they are not aware of the value of their work (Anwar & Graham, 2019). These technologies can earn technology companies billions of dollars yet this profit does not trickle down to workers who, in comparison, earn as low as \$9 a day for their work. Despite earning more than their counterparts in traditional jobs, the lack of awareness of the networks they are embedded in ultimately means that workers lack bargaining power to negotiate for the true value of their work.

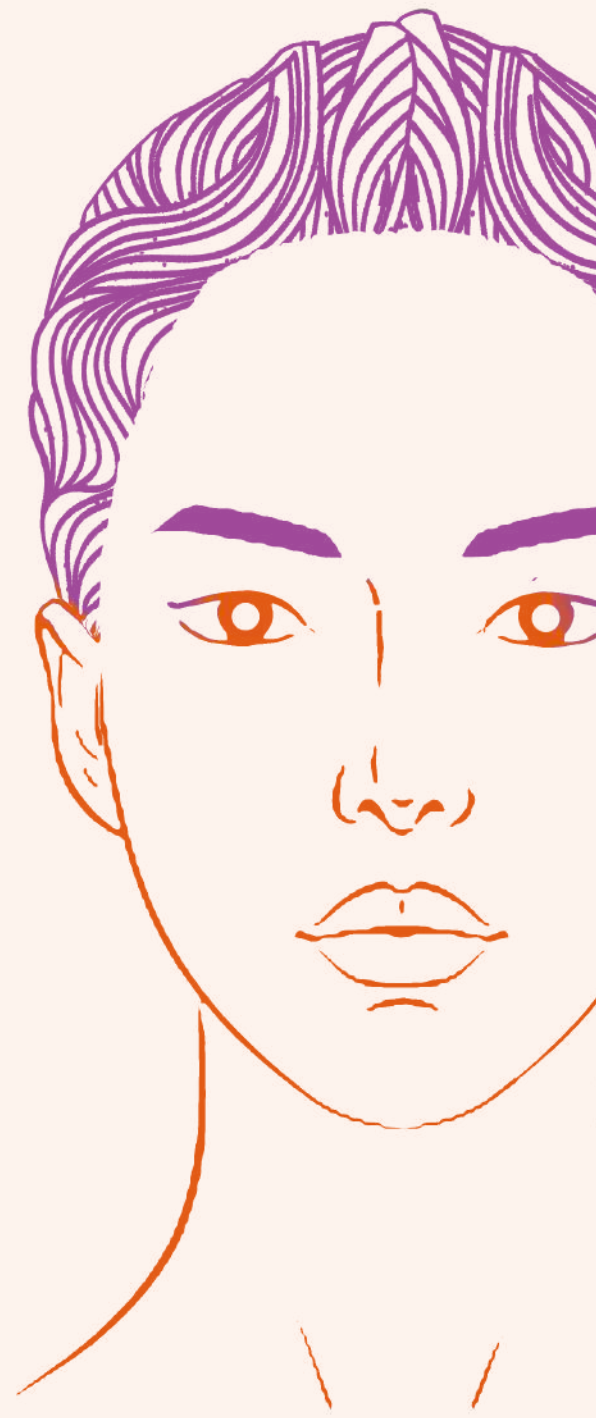
Lastly, digital labour platforms take advantage of the lack of labour protection in African countries and extract value from workers at minimal costs and in poor conditions. Researchers discovered that, in addition to being paid less than onshore employees, workers in Africa's outsourcing sector face harsh working conditions, including unsocial working hours, physical and psychological duress, and multiple types of labor insecurity (Anwar and Graham, 2019b). And in cases where digital labourers have been compensated for poor working conditions, the same has not been extended to workers in the Global South. In cases where compensation for poor working conditions have been made, onshore workers in the US benefited while offshore workers in the Global South did not. For instance, Facebook compensated former and ongoing content moderators in their US market a minimum of US \$1000 for mental health issues developed on the job, and offered an extra amount if they were diagnosed with Post Traumatic Stress Disorder (PTSD). Moderators outside the US were not offered this compensation, despite being exposed to similar and sometimes even more disturbing conditions.

# Case Study

## Business Process Outsourcing in South Africa

In 2020, South Africa overtook India as the UK's preferred choice for business process outsourcing (BPO) and offshoring (Johnston, 2020). Here, companies like Amazon, Accenture and IBM have found a large, readily available English-speaking workforce that they can hire at up to 40 to 50% less than what they would spend hiring locally (Deloitte, 2015; Johnston, 2020).

Yet, Anwar & Graham (2019) found evidence of intense workplace monitoring, mental, and physical stress, use of contingent employment practices, lack of collective bargaining, and a lack of career prospects among the BPO workforce. Furthermore, arguments that digital work provides a steady income in a market marred with unemployment are put to the test in the South African BPO sector. Call centers hire a mix of permanent and temporary workers, where the latter have lower salaries and no employment benefits. In fact, labour regulations discourage firms from offering permanent contracts, as this could hamper South Africa's competitiveness in the outsourcing sector. While digital labour platforms enable job creation, it is important to take into account the extractive working conditions imposed on workers in a bid for corporations to cut costs.



# Existing and Potential Policy Responses

Regulating digital labour is difficult because of the trade-offs at stake for African countries. For instance, if governments pass regulations promoting the protection of workers through permanent contracts and higher pay, then African markets could become less competitive for digital work. Experts and digital workers worry about companies relocating to other parts of the world as a result of regulation (Anwar & Graham, 2019). In fact, a key move made by African governments has been the deregulating of the labour market in an attempt to attract outsourcing opportunities. Yet, the fact that employees in this sector need labour protections in the form of stable work contracts, better pay and opportunities for upward mobility, and bargaining power remains.

A way workers can mobilize towards these goals is through trade unions which are capable of ably representing worker rights and interests collectively. Trade unions, also called labour unions, are associations of workers or employees in particular industries or sectors who work together to advance the rights and interests of their members. The activities of trade unions which typically involve negotiating better pay as well as decent, humane working conditions for their members are especially important in the landscape of today's global economy. The nature of globalisation in turn necessitates fresh approaches to unionising involving more than local or national organising but also coordinated approaches across continents and regions.

#2 Illicit  
Financial  
Flows



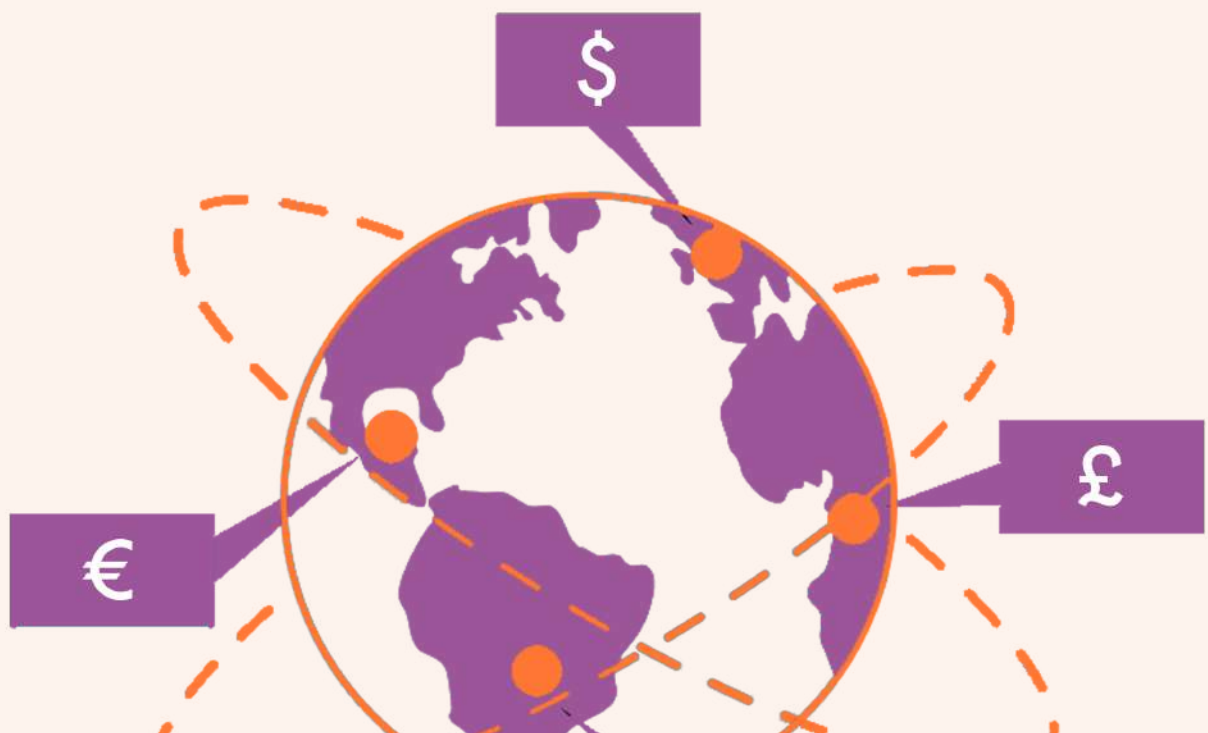
# Illicit Financial Flows

Illicit financial flows (IFFs) is a term used to describe the various means through which the payment of taxes are minimised or reduced. These methods include activities such as transfer mispricing (trade between related parties at prices meant to manipulate markets or to cheat tax authorities), treaty shopping, tax deferrals, corporate inversions, strategic location of debt and intangible assets, and the artificial avoidance of permanent establishment (Beer et al., 2018).

The Organisation for Economic Co-operation and Development (OECD) is currently working to effect beneficial changes to the international tax regime, which had previously determined nexus - where taxes should be paid based on physical location - and profit allocation - the portion of profits that should be taxed reliant on the arm's length principle - now inadequate to deal with taxation in today's digital economy.

In today's digital society, it is possible for multinational corporations and businesses to offer services globally without paying any taxes to the countries where these services are provided by exploiting existing treaties causing huge income and attendant losses in countries where the consumers are located. Through this, tax avoidance reveals itself to be a means by which value is extracted from the continent in the way little or no tax on revenue made from sales in African nations, in spite of the exploitation or use of African resources, is paid.

This carting away of revenue is reminiscent of colonialist activities which saw events such as the Benin punitive expedition of 1897 and others. The Benin expedition was a retaliatory attack against the Benin Kingdom for an ambush against a British officer. It saw the confiscation of royal treasures and cultural artefacts, many of which are now displayed in museums around the world, which were taken to London and auctioned as well as mass murders and arson.



# Case Studies

## Losses Derived from Illicit Financial Flows in Africa

Multinational corporations, such as Google, have in the past, exploited vulnerabilities in the global tax regime to avoid paying taxes in jurisdictions in which they're established, as a result of lax regulation and through schemes such as the Double Irish Dutch Sandwich.

The OECD values annual tax avoidance losses in Africa to be worth up to \$50 to 80 billion, an amount exceeding the value of development aid given to Africa yearly (OECD, 2021). The United Nations Economic Commission for Africa (UNECA) however places the value of capital flight to be about \$89 billion.

Similarly, according to (UNCTAD, 2020) sectors in Africa most vulnerable to IFFs and tax disputes include extractives, financial services and telecommunications.

## Uber's Champion(s) League of Tax Avoidance

Uber has often had reason to clash with authorities and drivers' unions all over the continent. The company's claim to be a technology company and not a taxi company has seen it avoiding tax payments to local and federal authorities everywhere it operates (Houeland, 2018).

In addition, Uber ride fares, considerably lower than those of commercial operators, leads to a race to the bottom - a competitive situation where a company, state, or nation attempts to undercut the competition's prices by sacrificing quality standards or worker safety (often defying regulation), or reducing labor cost.

Tensions sparked by the company's strategy have resulted in conflicts all over the continent. In South Africa, tensions resulted in violence meted out to Uber drivers as they were accused of undercutting the indigenous taxi drivers (Bell and Armytage, 2017).

Worse, tax evasion practices of the organisation have been revealed by research conducted by the Centre for International Corporate Tax Accountability and Research (2021) to have been accomplished using a complex tax shelter involving around 50 Dutch shell companies, what has now been described as the Champions League of tax avoidance.

Despite reaping a global operating revenue of over \$5.8 billion in 2019, the Dutch shell company reported a loss of \$4.6 billion to global tax authorities. Out of the 2019 revenue of over \$5.8 billion, 36%, a percentage amounting to \$2,086 million was derived from Europe, Middle East and Africa.



# Existing and Potential Policy Responses

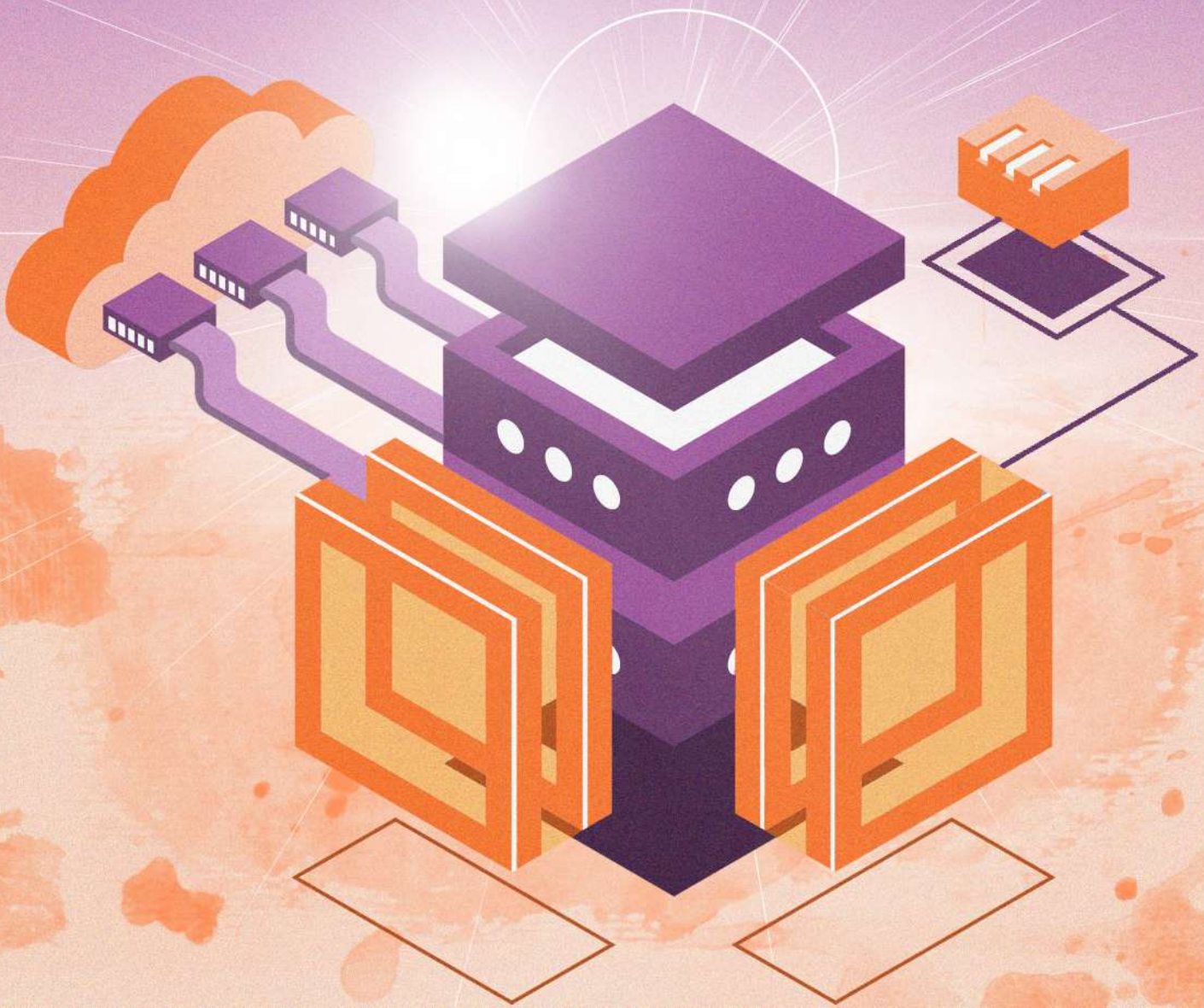
In some African countries, there have been policy attempts to tax digital multinational corporations, however many of these attempts, in the form of excise tax, negatively impact the economy as well as human rights such as freedom of expression and the press. The indirect nature of excise tax as well as Value Added Tax (VAT) also makes it easier for digital corporations to simply shift the tax burden onto the customers in a regressive manner.

While under the current taxation regime, subsidiaries of corporations are separately taxed for their business activities, a much more effective approach to tax justice would be taxing multinational organizations as a whole for business activities carried out in the jurisdictions they operate in. This approach would keep in mind the economic reality that the actions of subsidiaries cannot be divorced from the main and are simply part of an organisation's financial - tax avoidance - strategy. This approach known as formulary apportionment, is an effective way to calculate the rightful payable tax because it would allow and allocate to states taxes based on real economic activities superseding intellectual property domiciles.

As has been observed, tax administration all over the continent leaves much to be desired. Too often, it is manipulated and improperly supervised by corporate and political interests. In addition, the inability - or willingness - of African nations to oppose as a bloc, unfavourable policies dictated by wealthier nations leaves Africa at a disadvantage. In order to stem these losses and revitalise our economy, Africa, as a united front, must grasp the reins of its own tax administration firmly for a better economic future.

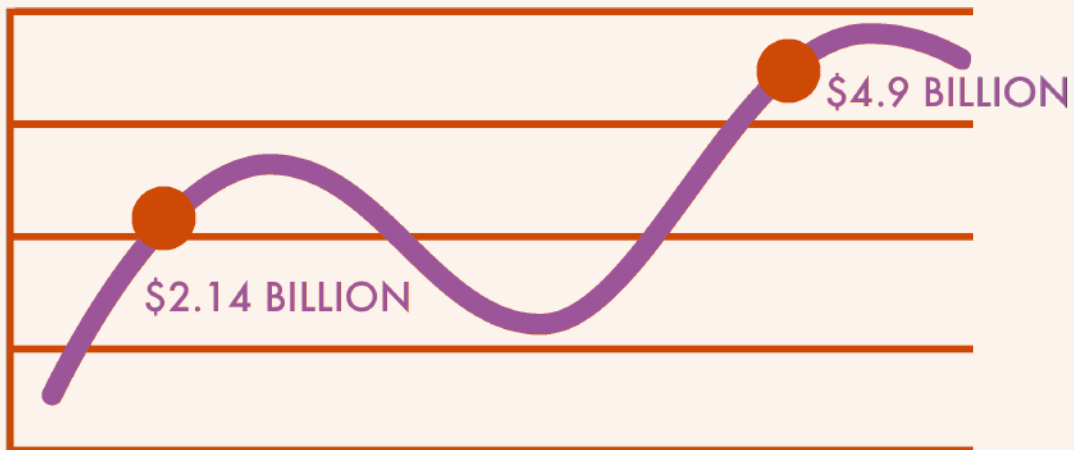


# #3 Data Extraction



# Data Extraction

Data extraction is the retrieval of data from numerous sources, existing in various formats, cleaning, restructuring, and enhancing the available raw data into the desired form. Data can exist in either unstructured, semi-structured, or structured forms. The value of this data is based on the ability to “make sense of the avalanche of data” (Coleman, 2019). Therefore, as organizations worldwide adopt advanced data analytics to inform decision-making, the data extraction market, wherein data is taken with little regard for consent and compensation (Sadowski, 2019), has rapidly grown. This market is valued at \$2.14 billion and is expected to reach \$4.9 billion by 2027 (Borasi, 2020).



Western tech companies have exploited minimal data protection legislation and local competition to set up widespread software communication solutions for the African market to collect user data. This data is in the form of consumer identities, consumer behaviors, beliefs, and other consumer-related information and is used primarily for profit by selling insights to political players or third-party advertisers. An example is the recent privacy policy update from Whatsapp. WhatsApp users received a notification explaining new privacy policy terms and that the application reserved the right to share some user data with the Facebook app (Reuters, 2021). However, there is a stark difference in the delivery of this update. While users in the EU can opt out of the policy implications, users in India and Africa face an “all-or-nothing” situation. They must opt-in to the policy agreement or abandon the service entirely. This leverages the “social significance of WhatsApp to force users into a bargain which may infringe upon privacy and data security” (Sharma, 2021). More recently however, in a surprising move, Whatsapp has backtracked on this stance, saying “we currently have no plans to limit the functionality of how WhatsApp works for those who have not yet accepted the update.” (TNW, 2021)

These practices are not restricted to Western companies alone. In an exhibit of coloniality, local players are adopting similar extractive practices, either due to lack of awareness of the harms or in a bid to stay competitive and profitable.

# Case Studies

## Free Basics

Developed by Facebook, Free basics is a mobile application that provides users free access to basic services and functions on the internet. According to Facebook, "Free Basics offers access to basic online services without data charges. In collaboration with mobile operators, Free Basics allows people to experience the relevance and benefits of being online for free, and acts as an onramp to the broader internet, with services such as news, health information, local jobs, communications tools, education resources, and local government information"(Facebook, 2021)

All of the data collected through Freebasics is stored on proxy servers owned by Facebook, granting them access to very valuable insights on user behaviour, even outside of the Facebook platform itself.

Free Basics was launched in August of 2013 and as of July 2019 was live in 28 African countries, including Kenya, South Africa, Nigeria and Tanzania (Nothias, 2020). While Facebook initially presented the project as philanthropy targeting unconnected rural communities, by monopolizing the websites that users browse and determining the terms of internet use, Facebook establishes their hegemony and control over users behaviour and activity.

## SafeBoda

Safeboda is a ride-hailing service that operates in Uganda, connecting users with affordable motorcycle rides, locally known as "boda bodas."

SafeBoda is one such example of data being extracted out of Africa to the Global North. In February of 2021 SafeBoda was implicated in unlawful activity by the National Information Technology Authority Uganda(NITA-U), revealing that Safeboda had shared user data with a third-party without user consent. The data was shared with CleverTap; a US based analytics company that specialises in customer engagement and retention platform, helping brands maximise user lifetime value and that of their mobile apps. CleverTap has been known to sell their acquired data to third party advertisers even though they say they don't in their privacy policy.

SafeBoda was later cleared of any wrongdoing by NITA U, and has since updated their privacy policy to ensure user consent of how the data they collect can be used.

# Existing and Potential Policy Responses

## The Malabo Convention

The African Union Convention on Cyber Security and Data Protection, also known as the Malabo Convention, was adopted by AU member states in 2014 to encourage the adoption and enforcement of legislation on protection of ICT infrastructure and citizen personal data. Its adoption of the Malabo Convention would greatly improve online freedom, safety and democracy across Africa.

However, to attain regional applicability and enforceability, the Convention must be ratified by 15 member-states. As of September of 2018, 14 member states have signed the convention, and only 8 have ratified it, including Angola, Ghana and Senegal.

## Existing Data Protection Laws

Aside from the Convention, a number of African nations have passed existing legislations for the protection and privacy of citizen data.

As of 2020, there were 17 countries with comprehensive data privacy protection laws, including South Africa, Tunisia and Ghana but an implementation gap still remains across Africa. One solution would be to have implementation agencies separate and independent from the government to circumnavigate state interference and bureaucracy. For example, under the newly enacted Data Protection Act (2019) in Kenya, it is stipulated that a regulatory office, called the Office of the Data Commissioner, must be set up to enforce the law under the new act. However, analysis of this act reveals that “the establishment of the office of the data commissioner as a body corporate does not grant this office with the necessary institutional and financial independence to execute its mandate effectively under the new law. In order to ensure the necessary independence and effectiveness of the Office it should be Statutory Commission which would be preferred to a State Office.”(Privacy International, 2019)



#4

# Natural Resource Mining



# Natural Resource Mining

Part of digital extractivism is in making the exploited party unable to create, own and utilize their own digital tools, and by exploitative mineral extraction, African countries are unable to build hardware components for digital solutions.

Dating back to the colonial era, African economies have been largely dependent on extractivism as an economic model. States give up vast amounts of minerals, labour and raw materials to be exported to the global North and in exchange import heavily, and almost exclusively, from the same global North powers.

Although there was an attempt by pan-Africanist and socialist leaders to nationalise the mineral resource industry, most nations on the continent have reverted back to a neo-extractivist model, that leaves them susceptible to great losses in the event of global recessions, such as the most recent one caused by the COVID-19 pandemic.

## Case Study

### **In the case of Coltan and the Congo**

Columbite-Tantalite, also known as Coltan, is a rare metallic ore that is used in the manufacture of chipsets found in a multitude of electronic devices made today, ranging from mobile phones to headphones and gaming consoles.

The Eastern Democratic Republic of Congo (DRC) sits on one of the largest Coltan deposits today, and the drive for profit from this mineral has fuelled the largest conflict in modern African history (Totolo, 2009).

With demand for the ore by Western corporations skyrocketing at the beginning of the 21st century, entire communities within the DRC turned to mining Coltan as a way to earn a living. The ease of profit also attracted the attention of various Militia groups, such as the Congress for the Defence of the People (CNDP) as a way to finance their endeavours. A report released by the UN in December 2008 revealed that many western corporations still exported Coltan out of the DRC, and financed local militias to obtain the ore, thus instigating conflict.

Increased media coverage and activist advocacy has prompted giant tech companies like Nokia and Samsung to publish specific corporate policies against the use of Congolese coltan. However, "even though corporations write in their websites that they do not buy Coltan in the DRC, these are only PR announcements that are impossible to implement"(Herman, 2009).

# Existing and Potential Policy Responses

## The Africa Mining Vision

The Africa Mining Vision (AMV) is a mineral governance framework that was adopted by the African Union heads of state at the annual AU summit of February 2009. It is an attempt to propose a strong rent extraction tax (a more realistic mining tax) from the mining sector and use it to finance programmes of structural importance on the continent (Bush, 2018).

The AMV aims to alter the current dilemma in Africa of great mineral wealth existing side by side with abject poverty, by upstream and downstream value addition, heavy investment in physical infrastructure as well as technology development (AU, 2009).







#5 Infrastructure Monopolies

# Infrastructure Monopolies

The building of infrastructure under colonial administration was underpinned by profit and value extraction motives, just as can be seen in the development of ICT infrastructure in Africa today.

Foreign control of the digital ecosystem has been described to hinge on three fulcrums: network connectivity, hardware and software, which in turn give rise to the following five related forms of domination:

1. Economic domination through a monopoly over resource extraction through rent and surveillance.
2. Imperial control over cultural, political and economic domains of life through computer-mediated experiences.
3. Surveillance capitalism through privacy violations in the interests of Big Data.
4. Targeted surveillance by Big Tech corporations in partnership with foreign intelligence outfits in the Global South and,
5. Tech hegemony throughout the enforcement of perceptions and conceptions of the digital world belonging to the foreign power (Kwet, 2019).

## Case Studies

In Africa today, the telecommunications infrastructure is mostly funded by public and private interests from Western and Asian countries. Partnerships with private tech corporations such as Google and Facebook for instance, have seen the laying down of submarine cables and partnerships with Internet Exchange Points (IXPs) to promote free internet or free access to the internet. However, the very nature of Free Basics and similar services undermines free and open internet principles. A free and open internet is one where the free flow of information is possible across networks and free from the pecuniary manipulations of Internet Service Providers (ISPs).

### Chinese Infrastructure Development

Africa's long history with Chinese partnerships have seen ZTE and Huawei developing the majority of the continent's network infrastructure - 50 % of 3G systems used by African telcos were built by Huawei and another 20% to 30% were built by ZTE, while Huawei has built up 70% of 4G networks and is likely to build all 5G networks (Wright, 2020). Strong state ties, in addition to high subsidies, have granted Chinese telecom companies a competitive advantage in contrast to their foreign investing counterparts.

In a similar way, partnerships with the Chinese government have seen funding and investments provided to African countries thereby filling gaping funding gaps Western donors have been reluctant to fill.

However, Chinese investments, which are supported by its non-interventionist, no-strings-attached stance have been criticised for sponsoring and supporting China's digital authoritarianism in African countries. African countries with a history of human rights violations and anti-democratic practices such as Uganda, Zimbabwe and Ethiopia have been reportedly encouraged by Chinese officials to purchase Chinese facial recognition surveillance systems. Cloudwalk's facial recognition deal with Zimbabwe, in particular, was touted as a "win-win" providing ostensibly better security for the African country and access to African faces to improve its facial recognition capabilities. In a way, this investment agreement is reminiscent of the Angola model, which required natural resources in exchange for infrastructure (R4I) funding from China. The ramifications of the adoption of this techno-autocracy are troubling especially since many parts of the region are politically and economically unstable.

In the past, accusations have been levelled against the Chinese government for spying on African Union (AU) officials and proceedings with the aid of listening devices strategically placed all over the AU headquarters in Ethiopia over five years since its erection in 2012 (Dahir, 2018). According to allegations, every night, data streamed from computers and other ICT equipment - provided by Huawei - at the Chinese-sponsored AU headquarters in Addis Ababa, Ethiopia, to unknown locations controlled by China. However, both the AU and Chinese authorities denied these allegations, and in some cases, described them as Western propaganda.

## **Western Surveillance Capitalism**

Suppose the inherent risk in dealing with Chinese investors stems mainly from the sharing and expansion of China's statist digital sovereignty ideal with dictatorial African leaders. In that case, the other side of the coin is Western and, more specifically, the US, surveillance capitalism and resource control.

A key feature of colonial infrastructure in the form of rails and roads, was its optimisation for the exportation of valuable resources to metropolises, with little to no investment towards connecting communities to one another. Today, this legacy is visible in the way tech products and services are designed to exclusively function on the operating systems of their manufacturers. The nonfungible nature of these systems and their inability to communicate with similar products and services on other operating systems, thereby sealing or consigning less affluent users to one form of communication is an exercise of power. This ability to influence customer/user decisions based on their purchasing capacity is especially troubling as it highlights just how easy it is to control what information a vast number of people are "permitted" to access.

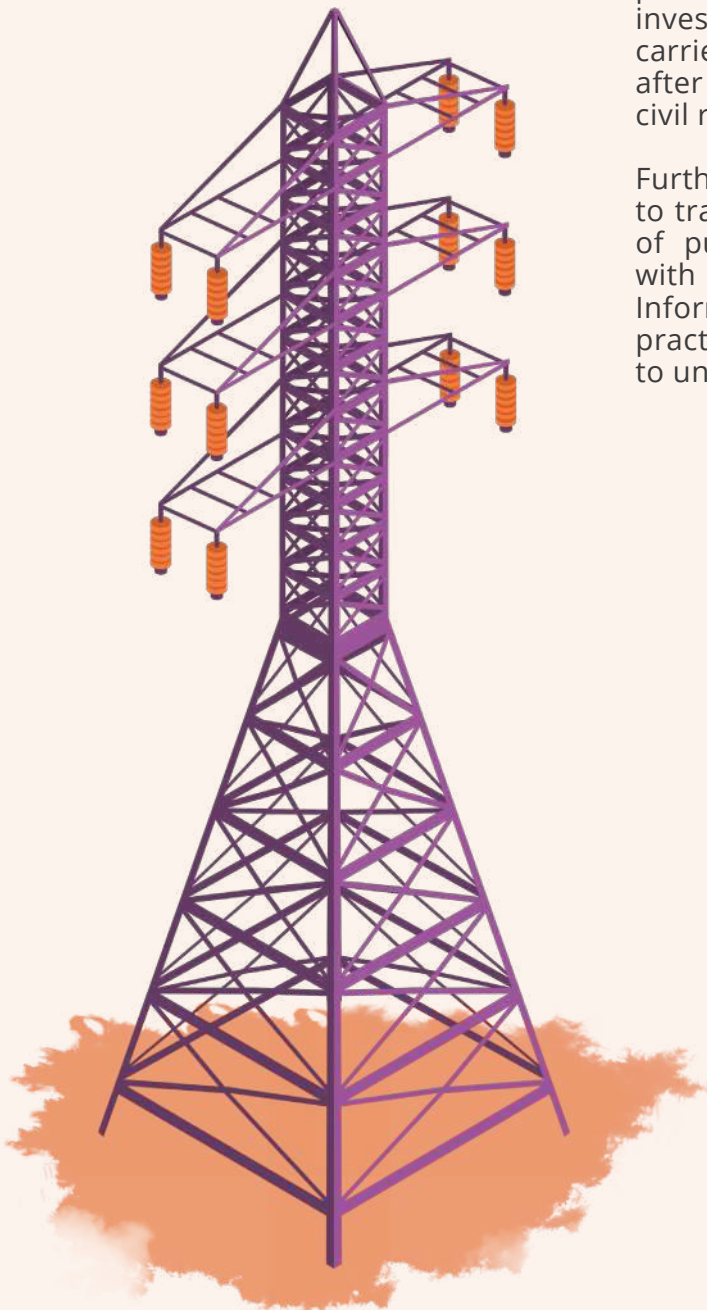
The deliberate design of these features makes it possible to extract data as well as revenue from users all over the world. Data extracted from African citizens is then used to develop various services including advertising and machine learning processing, and further used to breach privacy rights. Therefore, because data and data collection processes are opaque, it is difficult to scrutinise its quality and quantity for assessment purposes. Worse, data so collected is concealed and can therefore not be used by the government for public good.

# Existing and Potential Policy Responses

Addressing the problem of extractivism facilitated by the construction of telecommunication infrastructure in Africa, would involve stronger commitments to regional conventions by African leaders and stakeholders. It is time for Africa to present a united front in the face of foreign digital (neo)colonialism by adopting region-wide conventions in each member country.

In addition, infrastructural development and funding ought to be viewed as a public good involving consultations with members of the public, such that decisions regarding foreign investments and their terms ought not to be carried out unilaterally by the government but after extensive discussions with stakeholders and civil rights groups.

Furthermore, utmost importance must be given to transparency around the terms and conditions of public infrastructure agreements contracted with foreign governments and organisations. Information regarding costs as well as procurement practices should be made available and accessible to unions and other members of the public.



#6 Digital  
Lending

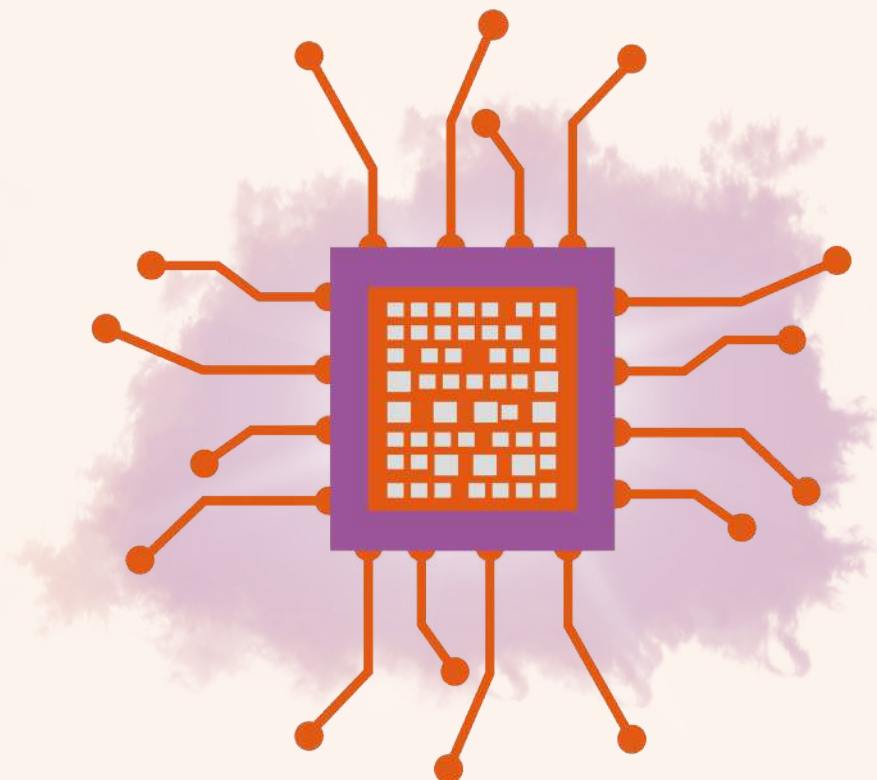


# Digital Lending

Digital lending is the process of offering loans that are applied for, disbursed, and managed through digital channels (Gathara, 2021). In this case, digital lenders use self-reported user information and data scraped from users' mobile phones, including call logs, contacts, location, social media activity and text messages to inform credit decisions like whether a person will repay a loan (Kessler, 2020). Digital lenders offer quick and near-instant loans without asking for collateral that traditional institutions normally ask for. These factors have made digital loans popular amongst young and low-income populations in Africa as the barriers of access to loans like financial records and collateral are entirely removed.

While digital loans were once seen as a way of providing financing options to previously unbanked populations, their impact has hardly been positive. Digital lenders combine extractive approaches in a bid to maximise their profits. They set high interest rates with high late repayment penalty fees and short repayment periods. In some cases, the interest rates levied once a loan is dispensed are often higher than those advertised.

They also collect massive amounts of data for the stated purpose of calculating whether a debtor can repay a loan. However, this data, which includes contacts, location, mobile money transactions, contacts, call records, browser histories, and even SMS records is often repurposed for targeted advertising without the consent of the user. This data is also used for social shaming, where a digital lender contacts people close to the debtor to shame them for not repaying their loans.



# Case Study

## Digital Loan Apps

Based in Norway, Opera Limited is a company that owns a suite of digital loan apps such as Okash, Opay, Opesa and Credit Hela operating in Kenya, and formerly Nigeria. Through its subsidiary digital lending platforms, Opera Limited extracts profits from borrowers with interest rates as high as 365 to 876% (Hindenburg Research, 2020). These high interest rates are charged at the expense of borrowers who are often young and unemployed, pushing them to go as far as taking out loans from other lending apps to pay for outstanding loans in a practice referred to as “loan stacking”. In fact, 40% of Kenyan borrowers have multiple (up to 10) mobile loan apps (Wasonga, 2020). Ultimately, these extractive practices have real life consequences as the media has reported borrowers getting into massive debt and even committing suicide after failing to pay their outstanding loans.

## Existing and Potential Policy Responses

Regulating the digital lending sector has proven difficult in African countries and the regulation gap in the scene has left very many consumers unprotected.

Where regulation does exist, digital lending apps regularly go on to breach the provisions of the law. For instance, while Kenya has a strong data protection law that spells out how companies should govern data and handle users’ privacy, a study found that none of the 7 major digital financing apps are compliant with the law (CIPIT, 2021). Fortunately, in this particular scenario, unions have come in handy, as some digital lenders have formed associations to draft guidelines on the lending process.

However, this measure is insufficient, as these associations are formed in the interest of private companies and not consumers and therefore reflect provisions to their own advantage. In addition, these guidelines are discretionary in nature and not binding on lenders who prefer to not join the associations. Ultimately, to provide adequate protection for consumers who bear the brunt of the extractive



practices in digital lending, there must be minimum standards laid down by the proper lawmaking body. These standards must also be binding on all industry players, not merely those who elect to join lender associations. Such legal provisions would also make provision for the award of civil remedies for borrowers and app users in case of harm encountered while using the apps.

The development of these laws due to the novelty of technological applications involved in the deployment of the platforms, should involve consultations with experts and industry stakeholders, civil society and members of the public to prevent the circumvention of the public and ensure subsequent legislation are beneficial and useful for the public good.





#7

# Funding Structures



# Funding Structures

Venture capitalists (VCs) have been accused of severe bias in funding offered to African startups. According to calculations, a white founder is 47,000% more likely to be funded in Kenya than in the US (Madowo, 2020). In addition, 65% of expatriate founders from the US, the UK, Italy, Denmark and Germany had not lived in Kenya before they started their companies (Madowo, 2020).

This ability of foreign investors to categorically determine what is of value in African contexts, based on familiarity biases, is akin to colonial practices and is essentially a form of neocolonialism as defined by the first president of Ghana, Kwame Nkrumah, in the following words: "The essence of neocolonialism is that the State which is the subject to it is, in theory, independent and has all the outward trappings of international sovereignty. In reality, its economic system and thus its political policy is directed from outside."

VCs from the US in particular, enjoy a special status as preferred investors, especially in the tech startup space, thus granting them massive influence over the growth and development of startups in the African startup ecosystem and allowing them to make profits which are afterwards transferred back to their home countries.

The VC process is optimised to reduce risk, which in turn leads many VCs to invest in individuals or areas that are familiar to them. However, this effort works out to ensure that the transfer of money based on value determination by VCs only occurs between individuals of a certain race and class to determine the nature of economic growth in African economic ecosystems. Describing funding bias in favor of African businesses founded by non-Africans by VCs, Swaady Martin, an Ivorian entrepreneur, believes funding bias "is another form of neo-colonialism." She goes further to describe it as a form of "...exploitation and is fed on white supremacy, white centering and white privilege, unconscious biases which have been institutionalized since the 15th century" (Onukwe, 2020).

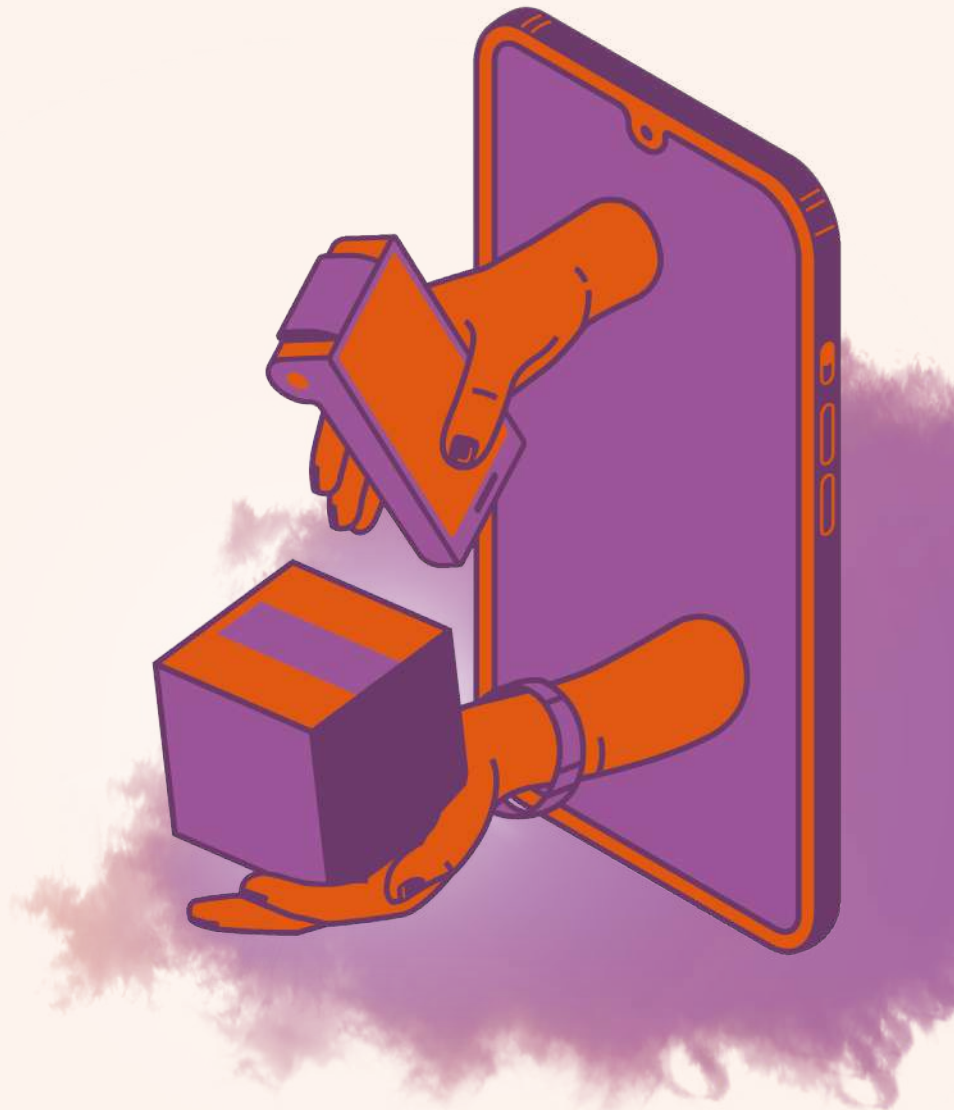
On the flipside, VC exploitation and extractivism is also facilitated through funding granted to foreign startups which merely seek to replicate already existing services in foreign markets with no regard for context. When coupled with the relative ease of access to capital, which these startups can attract the aid of Western connections, this practice has the unfortunate tendency to muscle out African entrepreneurs, depriving them of a fair opportunity to compete.

# Case Study

## Jumia

Jumia, the “African” online retail company often described as the Amazon of Africa, has been the subject of intense scrutiny ever since its launch and Initial Public Offering (IPO). As far back as 2019, the company was said by Juliet Anammah, the Nigerian country manager, to employ about 5000 African workers (Jumia, 2019). The company itself has a variety of offerings including but not limited to online retail with provisions for third-party sellers, delivery and shipment, and a payments platform.

However, Jumia has been scrutinised for attempting to pass itself off as an African company and throttling home-grown African startups. The company, it seems, in spite of its claims to Africanness has a curious history. It was incorporated in Berlin, and so, is a German company, has French directors operating from Dubai, as well as engineers and technicians based in Portugal. Regarding the latter, one of the company’s directors, Sacha Poignonnec, was noted to have said controversially, that there were not enough developers in Africa in justification of the company’s decision to employ Portugese engineers (BBC News, 2020).



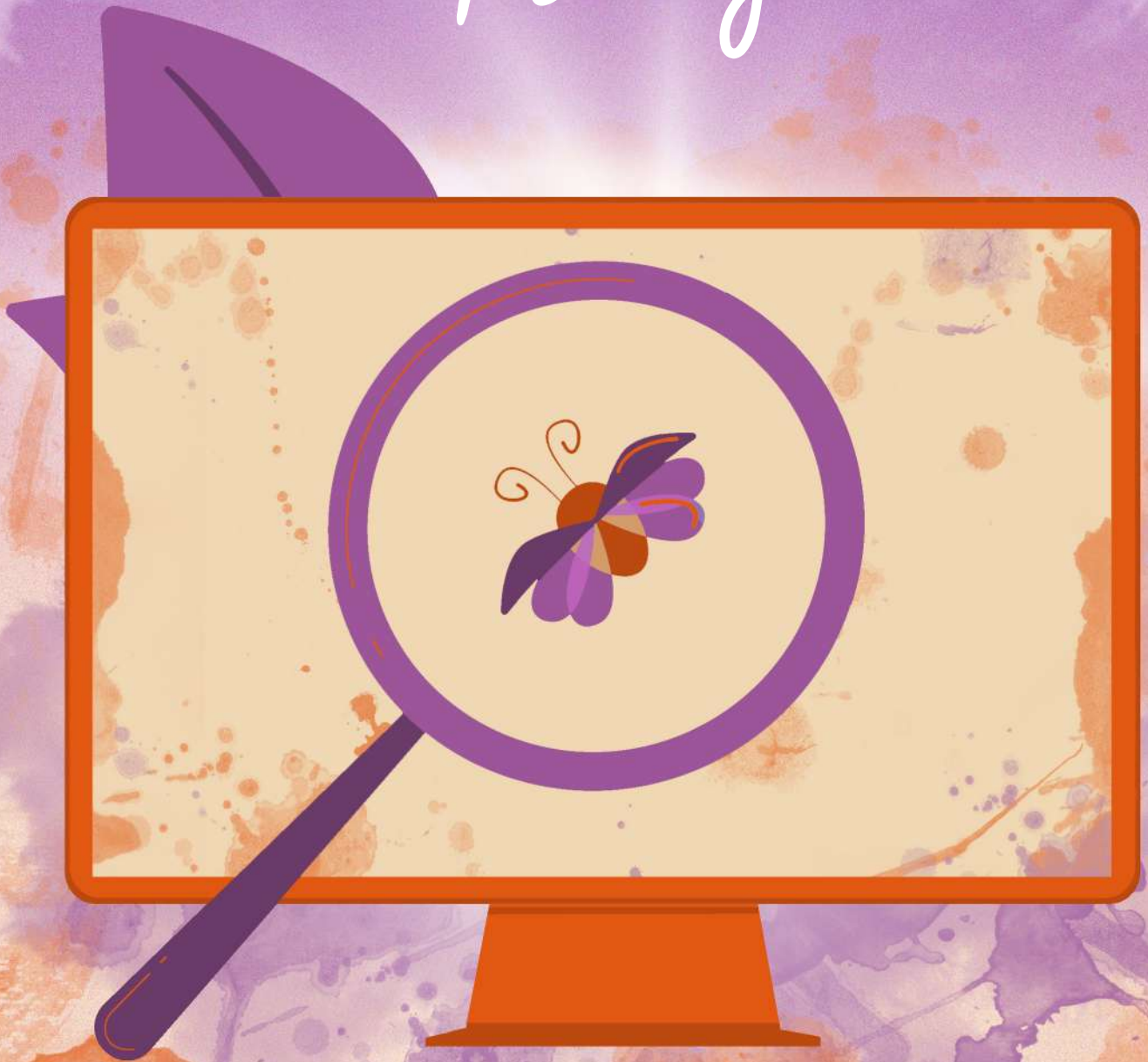
# Existing and Potential Policy Responses

Across Africa, laws and policies are being developed to support early stage entrepreneurs and startups. These policies are acknowledgements of the barriers in accessing funding by local founders and businesses. Startup laws also make regulatory provision for intellectual property protection and other incentives in a bid to incentivize startup growth. The 2020 Kenyan Startup Bill which was introduced to the Parliament in particular, provides that only startups majority owned by one or more citizens of Kenya may access incubator services, which include financial and legal resources provided by the government. So far, in Africa, only Senegal and Tunisia have passed Startup Acts on the continent although other countries including Ghana, Rwanda, and Mali have plans to do so.

In addition to the aforementioned Startup Bill, the Kenyan government also approved the passing of a National ICT Policy in 2020, which would see only ICT companies with 30% ownership, up from 20% in 2008, by Kenyan nationals being licensed to operate in the country. The Policy provided a grace period of three years for existing tech companies to comply with the requirements. The policy, tagged an indigenisation policy, has been criticised as poorly thought out and harmful to the ecosystem still extremely reliant on foreign startup funding.

Apart from legislative regulation formulation, there have been suggestions that VCs be compelled to contribute certain percentages to African startups, in addition to mandating non-African founders to contribute to supporting local startups.

#8 Beta  
Testing



# Beta Testing

Beta testing is the testing and fine-tuning of early versions of software systems to help identify issues in their usage in settings with real users and use-cases (Mohammed et al, 2020). It is done to determine the quality of technological products before releasing them to wider markets.

Despite the importance of beta testing, it has often been conducted unethically on vulnerable populations who often lack informed consent and have no bargaining power against the companies deploying the technologies. The African continent has a long history of being used as a testing ground as former colonies were sites for experimentation with new forms of medical and scientific innovations (Mohammed et al, 2020). Beta testing is a continuum of such experimentation on vulnerable African populations.

In recent years, experts have taken solutionist stances, promising that technology can be used to solve challenges like bureaucracy and inefficiency, corruption, and poor service delivery. Technologies such as biometrics, Big Data, and Artificial Intelligence have been put forward as a means to ensure accountability, precise decision-making, and efficient resource allocation. As a result, governments and international Non- Governmental Organizations (INGOs) are deploying such technologies into their operations. As these institutions traditionally lack technological expertise, they partner with the private sector as implementation partners.

These private-public collaborations have become sites for extractivism as the private sector attracts positive PR from 'tech for good' initiatives while gaining access to new markets, troves of data, and opportunities to pilot new technologies (Madianou, 2019). These situations become even more exploitative as corporations are not held accountable when the risks and side effects of the use of these technologies are discovered. This happens because of weaker regulation on the continent. Schroder et al (2018) refer to this as ethics dumping and define it as "the export of harmful and unethical research practices by companies to marginalised and vulnerable populations or to low and middle income countries".

On marginalised communities, the effects are compounded as data acts as a form of internal colonization and reinforces domination against them (Ricaurte, 2019). In this case, the data collected by private companies can be used by governments for control and surveillance of marginalised communities. At the same time, these communities find it hard to resist beta testing because of power dynamics between them and the institutions deploying the technologies.

# Case Study

Africa has been a site for the experimentation of new technologies on vulnerable populations because of a combination of factors such as the presence of humanitarian situations and the lack of adequate laws governing the use of new technologies.

Companies have benefited from testing their technology on unsuspecting populations before launching them in other markets. In Kenya, digital lending applications are known to lend money to borrowers without assessing their creditworthiness in a bid to train their algorithms to learn how to calculate clients' payback rates (Kessler, 2020). As digital lenders improve their algorithms, borrowers who do not have the repayment capacity are plunged into debt. This practice is referred to as algorithmic exploitation. It considers how institutional actors surrounding algorithmic tools take advantage of (often already marginalised) people by unfair or unethical means for their benefit (Mohammed et al, 2020). Another case of algorithmic exploitation occurred when Cambridge Analytica (CA) tested its algorithms in elections in Kenya and Nigeria before using them in US and UK elections (Nyabola, 2018). In these cases, CA took advantage of the Nigerian and Kenyan electorates' fears of ethnic and religious strife and targeted them with messaging meant to influence their voting decisions based on these fears. In a clear case of ethics dumping, CA was able to test out these techniques because of (the then) lack of strong data protection laws in Kenya and Nigeria. Ultimately, CA earned millions of dollars at the expense of voters who were vulnerable to misinformation.

Companies have also benefited from using Tech for Good initiatives to pilot their technology. This has been seen extensively in the humanitarian sector where the use of Biometric technology is increasingly being promoted as a way of ensuring accountability in aid delivery. Organizations like the UNHCR and WFP have pushed for partner organizations to integrate biometric technology into their work to demonstrate the effectiveness of their interventions (The Engine Room, 2018). Yet, the integration of this technology in aid delivery has been without extensive consideration of the risks and power asymmetries involved. First, errors associated with untested technology have real life consequences. In refugee camps, errors from misclassification or miscategorization in biometric systems can impact the ability of refugees to access resources. On the other hand, data breaches have implications on the privacy and security of refugees. As a result, questions of who owns and can access data collected and stored on biometric systems are essential. For instance, in Ethiopia, despite the government passing a law preventing the sharing of refugee data with external parties, refugees have expressed fear of their data being shared with governments in their countries of origin (Global Voices, 2020).

Second, the power asymmetries between humanitarian agencies and aid recipients blur lines of consent. A 2019 study by The Engine Room found that in Ethiopia, refugees appear to have no choice but to provide biometric data to UNHCR and host governments if they want assistance. The UNHCR denies aid to refugees who refuse to register on their biometric systems. Furthermore, refugees did not understand the biometric registration process, with some thinking that the iris scans were health scans for disease (The Engine Room, 2020). Ultimately, while refugees do not consent to technology use, “they produce value through their data and participation in humanitarian experiments, which is then used for the benefit of stakeholders, including private companies”(Madianou, 2019).

## Existing and Potential Policy Responses

Fragile environments should not be a ground for the disruptive and experimental approach that innovation often takes, given its real-life consequences (Madianou, 2019). As a result, institutions need to adopt ethical stances that prevent them from using technologies on populations before research in the form of surveys, audits, and other activities have been carried out.

African governments should also take caution when entering into public-private partnerships. They need to be keen on asking questions around ownership and use of users' personal data and set up strong data protection laws. Furthermore, African governments need to invest in innovation in the public sector, as a key reason they partner with private institutions is the lack of technological capacity and expertise to drive tech-based initiatives and programs.





#9

# Platform Governance



# Platform Governance

Content Moderation, an important aspect of platform governance, is the practice of screening, monitoring and applying pre-determined rules and guidelines determined by the companies or by the law on user-generated content to determine if the communication or information can remain visible to other audiences. In recent years, because of the scale of the number of users on these platforms and the demands from governments, law enforcement and civil society for expedient handling of cases, companies have moved towards automated systems for filtering content before a user posts content, after the user posts, in response to reports to the posts etc., enforcing community and law standards around sexual content, hate speech, terrorism, etc. However, there is a significant amount of ambiguity around how these systems work as these guidelines may be treated as industry secrets (Gorwa, 2020).

Furthermore, concerns are rising over the bias in both the platform guidelines and the automated AI application of these rules, particularly in how they discriminate against black and brown persons, marginalized groups, dissenting voices within certain countries etc. For example, research shows that tweets from self-identifying African American users on Twitter are about twice as likely to be classified as offensive or toxic by the existing models (Sap, 2019). The harms of these automated decisions as well as inconsistent and secretive internal policies continue to exert a long, controlling arm on political and human rights issues from afar. This has been witnessed in cases where posts with hashtags such as #EndSars (Special Anti-Robbery Squad in Nigeria), were flagged as disinformation or “fake news” due to conflation with SARS, the disease. In June 2020, Facebook took down the accounts of 60 Tunisian bloggers and activities, later claiming a technical error. These platforms also become vectors for spreading harmful and divisive messages on ethnicity, religion etc. and due to poor platform governance policies in the African context, these ideologies are allowed to proliferate unchecked on the platforms. This is similar to “divide and conquer” tactics that were very commonly propagated during the colonial era, which has left deep divides between countries and communities that are perceptible till today.

Social media companies are also secretive about the number of African languages that they are able to moderate content on. In addition to errors and poor practices related to content moderation on the continent, digital platforms are also able to force their hegemonic values on these countries that utilize their platforms. As already mentioned, in many countries across Africa, FreeBasics, the free internet service offered on certain mobile network operators means that most first time users of the internet come to understand Facebook as the internet. This means that the values that a company like Facebook espouses must also become the values that users subscribe to, with little say in influencing these community guidelines that are set thousands of miles away. As such, Global North countries are able to maintain their power by enforcing rules that African citizens must adhere to in order to access the internet, to participate in global discourse and to be part of the digital economy.

# Case Study

## **Assassination of Ethiopian singer Hachalu Hundessa and unrest in Ethiopia**

On June 29th, 2020, Hundessa was assassinated in Addis Ababa following a politically-motivated disinformation campaign on Facebook. This action led to unrest which left 166 people dead, with minorities like Christian Amharas, Christian Oromos, and Gurage people suffering the biggest losses. Immediately following Hundessa's death, hate speech and incitements to violence proliferated on social media platforms. The government responded by shutting down the internet. It was evident that platforms such as Facebook and Twitter did not have the appropriate content moderation systems in place to address the disinformation and hate speech on their platforms, and instead, amplified the violence both virtually and on the ground. For context, Ethiopia has a population of 112 million, with estimates of 21 million internet users, a number which is set to grow considerably.

At the time of this unrest, Facebook's community guidelines were not available in any widely spoken languages within Ethiopia and there were no full-time staff within the country. It is unknown how many content moderators are available to filter content in Amharic, Tigrinya etc. According to Vice, Facebook opened its first content moderation center in Africa in 2019 and promised to hire 100 people through a third-party service, Samasource, which would cover all 55 African countries and a potential market of 1.5 billion users. It is unclear what progress has been made regarding this effort. Furthermore, this implies an insensitivity to localized context, norms and culture.

Unclear content moderation policies, biased application of these policies, lack of investment in moderation in African languages and the lack of input of African users on community guidelines across digital platforms which are predominantly based in Global North/West is a form of digital extractivism that enacts real dangers upon the lives of African by amplifying unrest and then turning a blind eye to the resulting impacts.

# Existing and Potential Policy Responses

Countries across Africa are rushing to pass Social Media bills and Hate Speech acts to prohibit the proliferation of disinformation, hate speech, cyberbullying etc. on digital platforms, at the risk of severely infringing upon freedom of expression. In the case of Ethiopia where the Hate Speech and Disinformation Prevention and Suppression Proclamation was passed in March 2020, despite requiring social media platforms to remove hate speech within 24 hours of reporting, no process for removal was operationalized. Furthermore, such laws are likely to impact local social media or digital companies far more than big tech. When these bills, laws and acts fail due to either being too extreme or lacking clear processes, governments resort to shutdowns, impacting economies, education, and overall quality of life.

Content moderation remains one of our biggest and most important problems of our time. Experts have suggested a multi-stakeholder model that involves technology platforms, governments, civil society, academics, industry organizations and citizens participating in determining guidelines and governance systems in a transparent, rather than authoritarian and opaque manner, as is currently seen by both overregulating governments and under-serving technology companies.



# Further Research

The list presented above is not exhaustive, but rather a step towards further discussion and research. An additional method of extraction that would warrant further investigation is that of intellectual property laws from the perspective of industry trade secrets, but also the need to recognize how indigenous knowledge systems are often appropriated, co-opted and even erased by Western knowledge systems.

Intellectual property (IP) refers to intangible assets and creations of the human intellect, such as literary and artistic works, designs, formulae etc. IP is protected in law by patents, copyright and trademarks, thus granting inventors the sole right to exploit their innovation for recognition or financial gain. The Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS) is an international legal agreement between all the member nations of the World Trade Organization (WTO) that contains the minimum standards in relation to intellectual property. Most sub-Saharan African countries that signed the TRIPs agreement are working to conform to the international standards set, despite some unanticipated costs and negative repercussions such as higher costs and access to pharmaceuticals as recently seen regarding COVID19 vaccines. Digital trade, which falls under TRIPS, is of particular importance for the potential to impact issues pertaining to data collection and storage, data privacy, data localisation, restrictions on data transfer, net neutrality, algorithms, proprietary software and code etc.

For example, data on users preferences for products or services can be considered a trade secret, or data collection strategies and methodologies whereby algorithms are creatively utilized may qualify for copyright protection under or in certain sui generis data protection regimes (UNCTAD, 2019). In this way, African countries are disadvantaged by a lack of access to these technological processes and infrastructure, for eg. high resolution satellite imagery collected of African villages or search engine data may be classified as IP and kept out of reach of African innovators, governments and users. IP rights-holders are granted a monopoly on digital markets and are able to enact monopolistic policies on users and beneficiaries., thereby increasing their market power, increasing barriers to market entry and concentrating power in the hands of a few.

Thus, inflexible trade laws can exacerbate the power imbalance between the Global North and Global South by siding with big technology companies to keep code, data and processes inaccessible to African countries, in turn, promoting data extractivism.

Individual African countries have limited bargaining power when it comes to global trade agreements and therefore coalitions are an important instrument for increasing bargaining power in multilateral negotiations, especially when IP agreements are led by technologically advanced countries (Abdel-Latif, 2005). The value of coalitions is visible in trade relations in countries such as China, India and Brazil, which are now at an improved position to coordinate and demand for flexibility in the scope of TRIPS rules to allow for countries to choose appropriate public policies (Menezes, 2018).

# Recommendations

## 1. Strengthening of Trade Unions

Freedom of association is a fundamental human right, and the right to form unions serves as a powerful organizing tool to seek economic and social justice by demanding for improved working conditions. Through a unified voice and solidarity, these unions have an increased bargaining power when it comes to negotiating for better wages and benefits, equal rights and freedom from discrimination as well as exploitation, and health and safety. There is a need for stronger trade unions when it comes to the digital economy in the African context which can be achieved by organizing campaigns, educating workers on their rights and promoting labour laws fit for the new and ever changing technological ecosystem.

## 2. Awareness Raising on Consumer Rights

Civil society can play a major role in raising awareness amongst users of digital platforms on their consumer rights when it comes to how their personal data is collected, processed, stored and profited from.

## 3. Activism and Civil Society Pressure on Technology Companies

Many organizations across the continent are leading the way in demanding better from technology companies, both local and international on issues such as pay gaps, content moderation, response to online violence and disinformation, redress mechanisms etc

## 4. National and Regional Regulations, Policies or Agreements

The African Continental Free Trade Area (AfCFTA) is a free trade area founded in 2018, with trade commencing as of 1 January 2021 among 54 of the 55 African Union nations. The digital economy presents new opportunities for contemplating e-commerce, digital trade, industrial policy, competition, intellectual property, taxation, data protection, privacy, cybersecurity, labour laws, migration, information transfer and skills building. This means international cooperation across the AfCFTA member states to provide an enabling regulatory framework, improved physical and digital infrastructure and appropriate knowledge transfer or capacity building, to promote digital trade. There are many elements necessary for this to work include trust between businesses, users and governments, transparency, market access, free flow of information, intellectual property laws, appropriate taxation mechanisms, an openness to innovation, etc. The AfCFTA presents a new opportunity to put these regulations into practice.

## 5. Role of the African Union in Developing Convention for Digital Sovereignty

In 2014, 54 African union members states adopted The Convention on Cyber Security and Data Protection of the African Union (known as the Malabo Convention), which encourages member states to protect citizens' personal data, critical ICT infrastructure, and to encourage free flow and transfer of information to promote a more enabling digital space across Africa. As of September 2020, out of a total of 55 countries that adopted the Malabo Convention, 14 signed and only 8 have ratified. Since then, many countries have adopted local data protection laws. However, this convention could be broadened to include digital sovereignty that critically analyzes how digital extractivism impacts local digital governance and economies, and that also places a stronger emphasis on promoting cross-border data flows, freedom of information (particularly against rampant internet shutdowns across the continent) and enabling laws to foster growth and innovation.

## **6. Localization of Technology Companies**

It is only recently that some of the biggest technology companies are opening up physical offices in African countries. For example, despite being around since 2006, Twitter announced that it would open its first physical presence in the African continent in Ghana in April 2021. A lack of physical presence within the whole continent means that these companies can avoid paying taxes, avoid skilling workers, can continue to extract data and abide by laws of countries external to the continent, promoting digital extractivism practices.

## **7. Adoption of Decolonial/Anti-Capitalist Frameworks Grounded in Ethics, Care and Equity**

Interrogating capitalist logic that drives technology is a core tenet of the Feminist Principles of the Internet. The principle on Economy states that “We [communities] must work together to create alternative forms of economies grounded in principles of cooperation, solidarity, commons, environmental sustainability, and openness. Similarly, the second principle focuses on Open-source usage within movements and spaces, but can be applied to the larger technology praxis by committing to creating platforms that are open, accessible, free, transparent and secure by default. Makers and users should work towards creating technologies that are grounded in ethics, that ensure care of the labourers, environment and users and that promote equity through their use. Technology is a massive resource for collective action, solidarity and knowledge production/dissemination, and we need to consistently advocate for beneficial uses of these technologies.

# Key Terminology Explained

## **Algorithm**

A set of finite, well-defined, computer-implementable instructions to solve a class of problems or to perform a computation, such as calculations, data processing, automated reasoning, or other tasks, using precisely defined inputs and outputs.

## **Biometric technology**

The use of technology to digitally identify an individual using physical or behavioral human characteristics.

## **Big Data**

Voluminous, diverse sets of information that grow at rapid rates, characterised by the “three V’s”: volume of information, velocity or speed of creation or collection, and the variety or scope of the data covered. Big data can be structured (often quantitative, formatted and stored) or unstructured (more free-form, less quantifiable) and can come from a number of sources such as social media platforms, websites, smart devices, apps, behavioural patterns, purchases, etc.

## **Big Technology**

The most influential information technology companies in the world, namely the largest and most dominant companies which are all based in the United States — namely Amazon, Apple, Facebook, Google, and Microsoft.

## **Coloniality**

Coloniality of power is a concept advanced most prominently by Anibal Quijano on the practices and legacies of European colonialism is structuring hierarchies of society, prioritizing European methods of knowledge production and creating cultural systems based on these two aforementioned systems.

## **Data (or Digital) Colonialism**

The decentralised extraction, control and commercial use of data from citizens with or without their explicit consent through communication networks that are predominantly developed and owned by Western tech companies. While Western companies are not the only ones using extractive means to obtain data, a significant proportion of Africa’s digital infrastructure is controlled by Western technology powers such as Amazon, Google, Facebook, and Uber.

## **Data Extraction**

The act or process of retrieving data out of different data sources, that may be unstructured or poorly structured, for further data processing, storage and use.

## **Data Protection**

The process of safeguarding important, sensitive information from corruption, compromise or loss. Data protection laws and regulations mandate how this data can be stored and shared by organizations, businesses and government. Some of the principles of data protection include using data fairly, lawfully and transparently, using the data for specific



purposes, collecting only what is necessary, keeping the data for no longer than necessary and ensuring appropriate security against unauthorised access or processing.

### **Digital Authoritarianism**

The use of internet and similar digital technologies by authoritarian regimes to undermine civil liberties by decreasing through surveillance, censorship and repression of citizens by increasing political control and decreasing trust in public institutions.

### **Surveillance Capitalism**

An economic, market-driven system where personal data is commodified for financial gain whereby personal data and private experiences are captured by mass surveillance mechanisms on the internet. This free information from platforms such as search engines or social media platforms is converted into behavioural data for profit-making purposes, leading to an unprecedented concentration of knowledge and power in the hands of a few technology giants.

### **Trade Related Aspects of Intellectual Property Rights (TRIPS)**

The Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS) is an international legal agreement between all the member nations of the World Trade Organization that contains the minimum standards in relation to intellectual property. Intellectual property (IP) refers to intangible assets and creations of the human intellect, such as literary and artistic works, designs, formulae etc. IP is protected in law by patents, copyright and trademarks, thus granting inventors the sole right to exploit their innovation for recognition or financial gain.

### **Trade Secrets**

A type of protected intellectual property that comprise data, formulas, practices, processes, designs, instruments, patterns etc. that (a) is not known or easily accessible by competitors, (b) has economic value or provides an unfair competitive advantage and (c) is protected from disclosure through reasonable effort. Trade secrets may include market research, internal databases containing users personal information, behavioural profile, strategies, email lists etc.

# Endnotes

1. As of 2018, Samasource paid \$9 a day for data labelling work.

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1. As of 2018, Samasource paid \$9 a day for data labelling work.
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