POLICY ACTION NETWORK

PAN TOPICAL GUIDES

AI & DATA SERIES 7

SOUTH AFRICA'S DIGITAL ECONOMY: THE CHANGING NATURE OF COMPETITION & DATA REGULATION

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SUMMARY

With rising unemployment and a shrinking economy in South Africa, the economy requires urgent intervention and modernisation. The expansion of the digital industry presents an opportunity to do so. South Africa's competition and data protection regulatory frameworks do not currently provide an effective governance model that will ignite an inclusive digital economy. This is due to the ease of creating and abusing dominant positions in e-commerce and the presence of data localisation requirements which may be at odds with investment facilitation into the country. Recent amendments to the competition policy agenda attempts to address these concerns.

However, further reform is necessary to embed transparency in the prevention of virtual collusion, inequality in data usage and the development of a better consumer and customer centric approach. While South Africa's data localisation requirements may not in the long run affect its investment competitiveness, other factors such as investment in digital infrastructure and digital skills require attention. Consequently, a three-pronged approach in policy reform, infrastructure investment to redress widening digital inequality, and skills development to prepare South Africa's young workforce for the future of work is necessary.

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ABOUT THIS TOPICAL GUIDE

This series of PAN Topical Guides seeks to provide key research insights and policy considerations for policy-makers, and other interested stakeholders, on how these technologies need to be developed, used and safeguarded in a manner that aligns with the transformation objectives of South Africa. In addition, each Guide outlines ways in which South Africa may respond to the growth of data-driven systems and technologies, including AI, to foster and inculcate a more inclusive and equitable society, rather than deepen divides.

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BACKGROUND

Continuous developments in digital technology are shaping the global economy in unique ways. New technologies such as artificial intelligence (AI), automation and cloud computing have the potential to be an equalising resource in the advancement of economic and social inclusion, while at the same time infringing the protection of human freedoms. The extent to which AI can serve as a driving force for a developing economy such as South Africa's will depend on a number of factors. These include the regulatory design that is adopted for the governance of new technology and big data, the available digital infrastructure to support this expansion, the available digital skills within the South African workforce, as well as investment in digital innovation and entrepreneurship. These factors are not mutually exclusive.

DIGITAL SERVICES COMPETITION & TRADE

This guide focuses on principles of regulation that should inform South Africa's expansion of digital trade. Overall, there is a fair degree of inadequacy in two areas of governance - competition (in terms of efficiency for corporations) and trade (investment facilitation, regional integration, digital trade and cross-border flows). These areas require a careful study to develop meaningful policy approaches that will meet the needs of corporations who need access to new technology to be globally competitive while addressing the legitimate policy concerns of the South African government on protection of domestic industries, inclusive development, and privacy protection. While the focus of this guide is on digital trade, policy recommendations also consider the role of digital infrastructure, skills and investment.

The future role of South Africa's digital economy in promoting inclusive development cannot be advanced solely by developing and complying with regulation; rather, an assurance of an inclusive digital economy must ideally become the country's default mode of operation. In other words, how can South Africa effectively maximise digital technologies in a way that encourages innovative technological developments in digital trade and expands entrepreneurship to address the rising unemployment crisis and shrinking economy in South Africa?

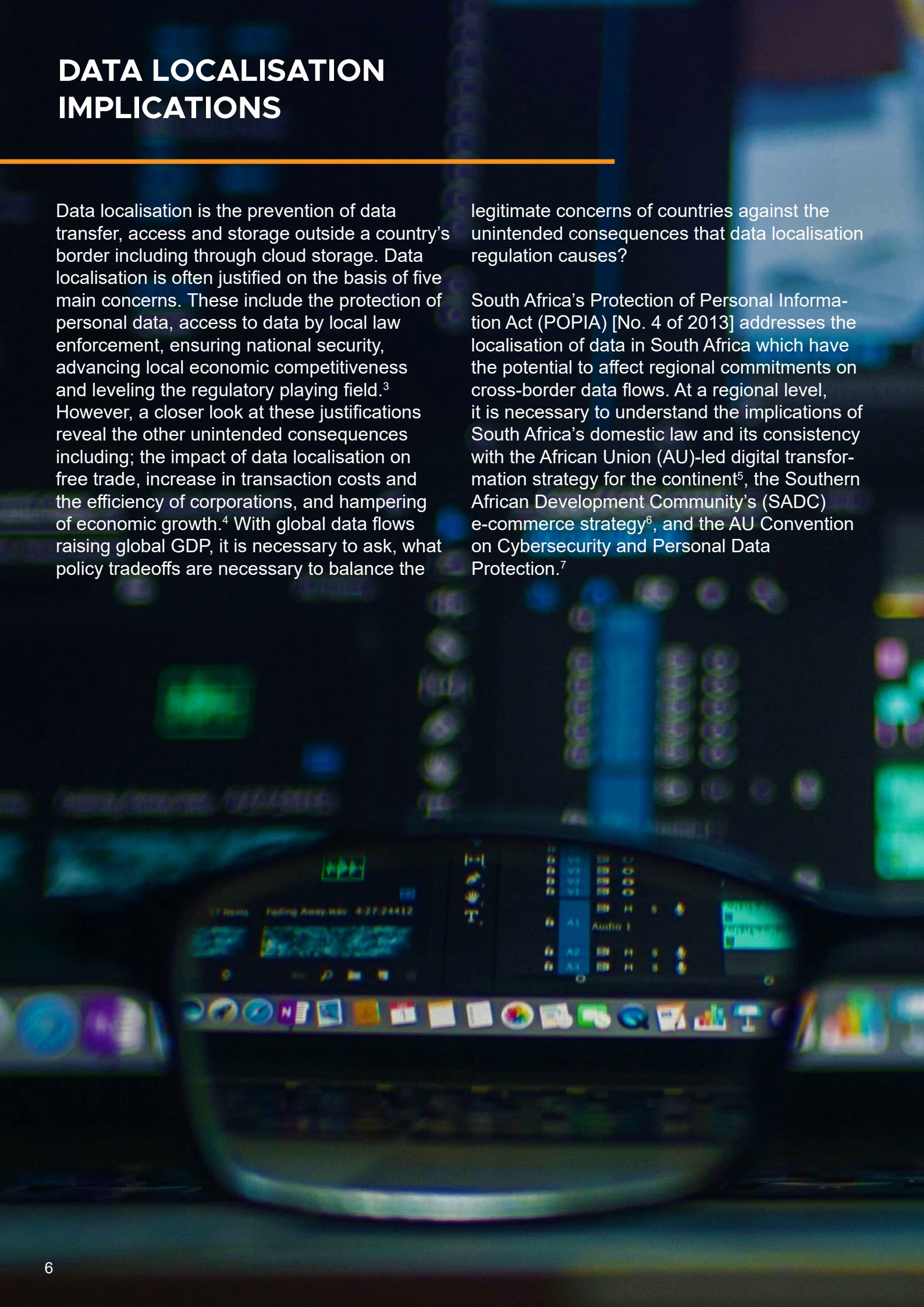
At the heart of the connection between AI, data and the economy is the notion of e-commerce. According to the World Trade Organization (WTO), e-commerce means "production, distribution, marketing, sale or delivery of goods and services by electronic means."[1] According to the SADC in its e-commerce strategy published in 2010, e-commerce extends to "all commercial activities carried out on electronic networks, including promotion, online sale of products and services, customer care, etc and is not limited to the internet."[2]

This broad definition covers the search, order, payment and delivery of products which have significant implications for cross-border trade. While South Africa is a member of a number of regional trade agreements and bilateral treaties, these agreements may facilitate e-commerce, however, cross-border digital trade will also be dependent on the extent to which South Africa's domestic laws allow data localisation.

DATA LOCALISATION IMPLICATIONS

Data localisation is the prevention of data transfer, access and storage outside a country's border including through cloud storage. Data localisation is often justified on the basis of five main concerns. These include the protection of personal data, access to data by local law enforcement, ensuring national security, advancing local economic competitiveness and leveling the regulatory playing field.[3] However, a closer look at these justifications reveal the other unintended consequences including; the impact of data localisation on free trade, increase in transaction costs and the efficiency of corporations, and hampering of economic growth.[4] With global data flows raising global GDP, it is necessary to ask, what policy tradeoffs are necessary to balance the legitimate concerns of countries against the unintended consequences that data localisation regulation causes?

South Africa's Protection of Personal Information Act (POPIA) [No. 4 of 2013] addresses the localisation of data in South Africa which have the potential to affect regional commitments on cross-border data flows. At a regional level, it is necessary to understand the implications of South Africa's domestic law and its consistency with the African Union (AU)-led digital transformation strategy for the continent[5], the Southern African Development Community's (SADC) e-commerce strategy[6], and the AU Convention on Cybersecurity and Personal Data Protection.[7]



REGULATING DATA-DRIVEN DIGITAL SERVICES

To harness the power of entrepreneurship in the digital economy, a country's competition policy is crucial. Competition often drives efficiency which typically occur with new entrants into a market, especially in the technology market.[8] As a result, a key consideration is the extent to which there are barriers to entry created by established market players to prevent competition, especially in the case of AI and data-driven services which tend to favour incumbent, often global firms which have been able to acquire large amounts of data.[9] In competition regulation, the price of a product is a determining factor in protecting consumer welfare.[10] This is the approach also taken in South Africa's Competition Act.[11] However, with new technology products often zero-rated for the consumer, a new focus is necessary by looking at service quality and in several cases, privacy protection.

As South Africa scrambles to develop regulation to catch up with the pace of developments in its digital economy, there are emerging outcomes that demand our collective attention. These include the governance of global tech companies, data protection and an interpretation of South Africa's data localisation priority which lacks a nuanced understanding in terms of the impact of this framework for digital trade, investment facilitation, competition, and entrepreneurship.

South Africa's current unemployment rate is 26.7%[12] and in the latest GDP numbers released in September 2020, South Africa's GDP fell by around 16% between the first and second quarters of 2020 in the wake of the COVID-19 pandemic.[13] The economy is desperate for a form of ignition and digital trade presents this opportunity. According to recent data released by Statista, South Africa is now the 37th largest market for e-commerce with a revenue of US$3 billion in 2019.[14] It is estimated that for the next four years, there will be a compound annual growth rate of 12% in the digital market despite South Africa only having a 35% online penetration.[15] These indicators represent a huge opportunity for growth through strategic investment in the digital sector.

Despite these opportunities, there are policy questions that need to be addressed. Has the South African Competition Commission fully considered the implications of big data where data-driven mergers can create abuse of dominance with implications for privacy, consumer protection, and competition?[16]

DATA CONTROL & NON-PRICE COMPETTITION

One of the most important commodities of the global economy in the 21st century is data. The advent of e-commerce and social media platforms that have increased global connectivity has led to the development of data protection and privacy standards adopted by countries including South Africa. These data protection laws often aim to limit the cross-border flow of data between countries with an impact on data processing activities and leading to data protectionism.[17]

In highlighting this balance of interests, the European Competition Commissioner once remarked:

> *"The more data you can collect, the more you know, the better product you can provide, but also the more powerful will you be towards others. . . It's very important for us to be able to say what is competition-related and what is an issue of privacy, ownership, data, [and] how you can be as secure on the net as you can be in the physical world."*[18]

Digital technologies themselves offer opportunities for practices that reduce competition in a market through controlling data flows and the design of algorithms that work to specifically counter traditional competition regulation tools and facilitate anti-competitive practices such as virtual collusion.[19]

As suggested by Khan,

> *"... pegging anticompetitive harm to high prices and/or lower output— while disregarding the market structure and competitive process that give rise to this market power—restricts intervention to the moment when a company has already acquired sufficient dominance to distort competition."*[20]

This form of market dominance reduces effective competition. South Africa has attempted to curb the factors leading to the establishment of such dominance by regulating market structures through a new public interest criteria in merger controls.[21] This warrants closer examination, especially in the application to e-commerce where a dominant firm can exclude a competitor where digital platforms for the sale or supply of a product are controlled by a dominant firm and the same dominant firm sells its own products. This creates risks in digital trade and such dominance not only affects privacy but also trust in a market economy.[22] Central to this is the notion of 'data justice' which has become 'an inequality issue, as companies use data to exploit

society's more vulnerable members, thus furthering the income divide.'[23]

In the tech industry, startups can be acquired by dominant platforms, acting according to high incentives to have market power with unprecedented access to the commercial information of competitors. An example of this within South Africa is the company, Takealot.com, which made $69million in revenue in 2019 and is the largest player in South Africa's e-commerce market.[24] To establish its dominance, the Naspers-owned company has acquired a number of competitors since 2011 and its most recent merger of Superablist.com and Spree.co.za was completed in 2018.[25]

This form of practice requires policy making that is proactive and should be preventative and not remedial in ensuring that the digital market remains competitive and inclusive. This will require unprecedented transparency in the use of data, terms and conditions as well as pricing.[26] This sort of transparency is not currently embedded within the Competition Act.

South Africa's competition law framework was adopted in 1998 with an objective to address the market concentration problems in the South African economy that were created during apartheid to benefit a handful of firms.[27]

With this objective, the competition law framework was not fit for purpose for governance of digital companies and the new challenges they present. Recent regulations promulgated under the Competition Act now recognise 'ecommerce and online services' as a designated sector and prohibits anti-competitive practices in a designated sector such as imposing unfair prices or trading conditions on small and medium businesses and firms controlled or owned by historically disadvantaged persons.[28]

However, the South African approach is limited to small and medium businesses, unlike in the EU which focuses on 'the opacity of platform services which might lend itself to an abuse of bargaining power.'[29]

The Competition Amendment Act introduces a set of new rules in establishing abuse of dominant positions. This includes the introduction of a reverse onus on a dominant firm where excessive pricing is alleged to show that their prices are reasonable.[30] The new provisions extend not only to consumers but also customers - intermediate buyers of product - which means that a dominant tech firm with a platform cannot charge excessive prices for usage to its small and medium sized competitors.[31]

These regulatory developments are necessary to prevent dominant firms like Takealot.com from killing off competition from third party suppliers on its platform for example.

In addition, dominant firms are prohibited in the Amendment Act from selling downstream products at a price that prevents downstream competitors from effective competition.[32] Furthermore, refusal to supply scarce goods or services to a competitor or customer when supplying those goods or services is economically feasible to do so is now considered abuse of dominance.[33] The extension of this rule to services now covers big tech as well.

The Amendment Act establishes an "adverse effects" test which allows the Competition Commission to conduct a market inquiry if there is a feature in a market that restricts, impedes or distorts competition in that market.[34] Some of the descriptions of a feature in a market include structure of a market, including levels of concentration and ownership as well as barriers to entry. Others include outcomes observed in the market including, 'prices, customer choice, the quality of goods or services and innovation.'[35]

While the new amendment in the Competition Act fills a regulatory gap, it does not develop new principles to guide the framework into an emerging digital age in which dominant firms can leverage their privileged access to data to restrict competition.

EMERGING POLICY NEEDS & RESPONSES

There are three main powers that apply to the dominance of firms in the tech industry. The first is gatekeeper power which 'gives platforms the ability to extort.'[36] The second is leveraging power which 'gives platforms the incentive to discriminate in favor of their own goods, services, and applications over those offered by other businesses.' The third is 'information exploitation' where digital platforms collect data on consumers and competitors to exploit consumers and kill off competition.[37]

To address these power disparities, the concept of 'platform neutrality' has been proposed where a platform is required to 'treat all commerce flowing through its infrastructure equally, preventing a platform from using the threat of discrimination to extract and extort.'[38] In addition, platform neutrality will limit the ability of dominant firms to use their market power and advantage to push out competitors. This approach has been adopted under Europe's General Data Protection Regulation (GDPR) which prohibits digital platforms' from using information collected on their platforms to improve distinct lines of business.[39] This should also include ending surveillance-based business models and the implementation of merger controls test in the future merger of tech companies.[40]

At the African regional level, a similar robust regulatory strategy that would guide South Africa's relationship with its regional trading partners is not yet in place. The African Union Convention on Cybersecurity and Personal Data Protection which has not yet been ratified by the minimum number of 15 countries required for it to be operational sets out the continental e-commerce agenda alongside the African Union Digital Transformation Strategy. In addition, negotiations on the e-commerce protocol under the African Continental Free Trade Area (AfCFTA) have not begun. However, the AU has urged member states to review their bilateral agreements to clear the way for the negotiation and implementation of an AfCFTA Protocol on e-Commerce which will promote the emergence of African owned e-Commerce platforms at national, regional and continental levels.[41]

South Africa's international trade agreements and bilateral investment treaties do not directly address the primary considerations that this guide is seized with in relation to data governance. However, national regulation addresses this specifically through data localisation and protection laws.

South Africa's POPIA[42] requires consent before data transfers to other countries. If there is no consent, the data transfer can only happen where the third party is subject to a law, binding corporate rules or binding agreement that provide an adequate level of protection; the transfer is necessary for the performance of a contract between the data subject and the responsible party; or the transfer is necessary for the implementation of pre-contractual measures taken in response to the data subject's request. Advances in technology frequently shift the goal posts on data protection with two areas particularly relevant for dynamic regulation and the digital economy - cloud computing and big data.

Cloud computing aids cross-border data transfers while big data helps dominant firms in revealing patterns and trends that can be weaponised to kill off competition but also creates privacy concerns and cybersecurity issues.

In adopting the rule in POPIA with restrictive data transfers, South Africa becomes a less attractive market for tech firms who

may feel restricted by the inability to embrace cloud computing fully. However, South Africa's law is not unique. It is consistent with EU's GDPR seen as the gold standard in data protection. The problem with such stringent rules for South Africa's cross-border trade is that its regional partners do not have data protection laws with the adequate level of protection that POPIA aims to prescribe. This presents a challenge in conducting trade with regional partners where data transfer is required.

It is worth noting though that data localisation requirements have not hampered the expansion of the digital economy of other countries. For example, China, has been able to increase its share of the e-commerce market from 1% to over 40% within a decade and is home to a third of total global tech start-ups valued at over $1 billion.[43] This has occurred despite China having one of the most stringent data localisation requirements.

This shows the importance of understanding the relevance of different factors for the expansion of an inclusive digital economy. In the AU's Agenda 2063, it envisions Africa as

" a continent on equal footing with the rest of the world as an information society, an integrated e-economy where every government, business and citizen has access to reliable and affordable ICT services… and providing venture capital to young ICT entrepreneurs and innovators."[44]

This speaks to the need for investment in digital infrastructure and development of digital skills among our unemployed youth. In a recent study by McKinsey, South African companies that invest in digital talent can expect as much as 16% in revenue growth. Companies such as BCX 'announced a partnership with the Cape Innovation and Technology Initiative to grow scarce digital skills in ICT infrastructure and software programming, cybersecurity, fintech and artificial intelligence.'[46] Such public-private sector partnerships are needed and the recommendations below address this.

RECOMMENDATIONS FOR POLICY & PRACTICE

There are emerging successful local tech start-up businesses in South Africa. For example, as reported by Deloitte, local start-ups, Domestly and Kandua aggregate demand and supply for domestic services and household repair services.[47] Such initiatives in different sectors can expand the 'opportunity for the same efficiency and trust effects to unlock latent demand for a range of domestic and blue collar services.'[48]

To improve regulation that will ignite South Africa's digital economy, we need a policy agenda that will be responsive and flexible to the fast pace of technological developments and will ensure that systemic inequalities are not inadvertently being created as current players in the digital industry consolidate their powers. Here, we need to revisit how competition regulation can address non-price competition which emerging data and AI capabilities are enabling:

1 Any new regulation should include a proactive measure that anticipates and prevents anti-competitive practices in e-commerce, such as virtual collusion. Such policy making does not wait for these risks to materialise but aims to prevent them from occurring.

2 Given the problem relating to dominant firms' access and potential use of the market data of competitors, small or medium firms are vulnerable to exploitation and South Africa's competition regulation needs to protect these entities against unfair competition. This is particularly important where dominant firms can potentially use South Africa's POPIA to restrict its competitors from using access to market data generated on their digital platform.

3 The competition regulatory framework should be able to accommodate the public interests of the state and the needs of businesses. In essence, a zero-sum approach should not occur where trade-offs are made by creating false dichotomies between business efficiency for tech companies and privacy protection for example.

4 Transparency is required to assure business stakeholders about appropriate usage of data by dominant firms that does not prevent market access for smaller firms. This transparency requirement can be achieved while protecting data processing rules.

5 Such regulatory frameworks must be consumer-centric recognizing that traditional competition tools such as regulating excessive pricing may not be applicable and a focus on non-competition practices such as service are more important in the tech industry.

However, a revamped competition policy for the e-commerce industry is only one of several pieces in the puzzle. As technological advances occur, frequent country skills audits are necessary to assess the availability of digital skills in South Africa's workforce, institutional capacities to develop these skills and an education policy to prepare young people for jobs that a digital economy will create in the future.

These possibilities can only happen if we confront the problem of internet accessibility, availability, and affordability. There are still-low levels of broadband ICT access and, in turn, digital literacy, in South Africa.[49] The prevalence of low levels of access, digital literacy, and the lack of relevant content has widened the digital gender gap[50] at a time when the fourth industrial revolution is expected to create jobs that do not exist today, creating a concern about the further marginalisation of already marginalised people.[51]

A potential solution to some of these challenges is for the government to embrace public-private partnerships to facilitate investments into the digital sector, to establish innovation hubs, to develop digital entrepreneurs and to tackle a growing skills mismatch as South Africa modernises its economy.

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