

Presentation Notes



The banner features the WAPA logo on the left, which includes a red Wi-Fi symbol and the text 'WIRELESS ACCESS WAPA PROVIDERS ASSOCIATION'. To the right, the text 'WAPALOZA 2022' is prominently displayed in white, with 'Misty Hills Country Hotel, Conference Centre & Spa' below it in a smaller white font. The background is a dark blue map of South Africa with a glowing Wi-Fi symbol and network lines.

**Sustainable Development Goals
New Opportunities and Lifelines for WAPA?**

An Opinion by Walter Brown: walter@sakan.org.za
presented to WAPA Members at the

WAPALOZA 2022 CONFERENCE | 24 – 28 October 2022

PDF Copy of WAPALOZA 2022 presentation: <https://www.sakan.org.za/Docs/WAPALOZA%20Presentation%202022-%20WB%20September%202022.pdf>

PDF Copy of referenced WAPALOZA 2019 presentation: <https://www.sakan.org.za/Docs/WAPALOZA%20Presentation%20-2016-18%20Sept%202019%20by%20Walter%20Brown.pdf>

Access to Hyperlinks:

- All images are presented in graphic formats; embedded hyperlinks will not work.
- Critical hyperlinks are included in the notes text wherever possible, enabling access to the references via simple clicks;
- If hyperlinks in the graphic images are required, please access them using any one of the following methods:
 - Type the hyperlink text provided in the image directly into your system's search engine, and search;
 - Open the original PowerPoint Presentation or via the PDF links provided, copy the imbedded hyperlink and paste into your system's search engine and search;
 - Open the original PowerPoint Presentation in presentation mode and simply click on the hyperlink to launch the required document.

For clarification of any issue arising from the notes, or for additional or copies of reference material, please email walter@sakan.org.za, I will respond as soon and as best that I can.

SLIDE 1: Continuation of SDG discussions from WAPALOZA 2019, copy of presentation posted at:



<https://www.sakan.org.za/Docs/WAPALOZA%20Presentation%20-%202016-18%20Sept%202019%20by%20Walter%20Brown.pdf> ;

1. Reminder of What the SDGs are, and how they relate to South Africa’s National Development Plan 2030 (NDP), and to WAPA and its members and their business plans, strategies and visions:
2. Are the South African National Challenges as defined in the SDGs and the NDP Opportunities or Threats for WAPA Members?
3. Can they be both Opportunities and Threats?
4. How can WAPA members leverage the opportunities presented by the SDG and NDP national challenges?
5. How can WAPA members minimise the threats while at the same time taking advantage of any business opportunities that may arise from ameliorating or reversing the national threats?
6. What must WAPA and its members do to maximise the organization’s strengths and the opportunities presented by the nation’s challenges? What must WAPA and its members do to minimise the organizational weaknesses and threats imposed by the national challenges?
7. How can an effective SWOT analysis and the resulting corrective programmes and strategies be structured and maintained over time to continuously monitor WAPA progress and sustainability?

SLIDE 2:



Link to the reference presentation is

[https://www.sakan.org.za/Docs/WAPALOZA Presentation - 16-18 Sept 2019 by Walter Brown.pdf](https://www.sakan.org.za/Docs/WAPALOZA%20Presentation%20-%2016-18%20Sept%202019%20by%20Walter%20Brown.pdf):

To access the reference document, please click the link in Slide 2 in PowerPoint presentation mode, click the link above, or copy the link text above and paste/search using your device’s search engine.

SLIDE 3:

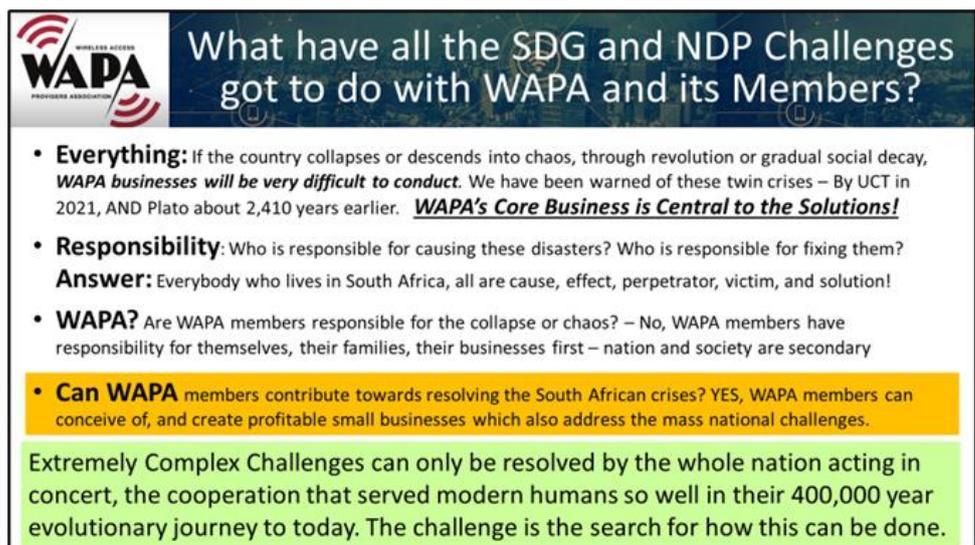
Guiding philosophy:

About 2,500 years ago, the much-cited Greek Philosopher Plato cautioned the world against building two parallel cities, “the city of the poor and that of the rich,” where the poor struggle to be productive citizens and plot against the rich — while the rich become luxurious, idle and plot against the poor:

“We maintain that if a state is to avoid the greatest

plague of all - I mean civil war, though civil disintegration would be a better term - extreme poverty and wealth must not be allowed to arise in any section of the citizen-body, because both lead to both these disasters”. Plato, circa 340 BCE.

(Source: Frank A. Cowell’s interpretation and translation of Plato’s “The Laws”, available at [http://darp.lse.ac.uk/papersdb/Cowell measuringinequality3.pdf](http://darp.lse.ac.uk/papersdb/Cowell%20measuringinequality3.pdf).)



Fast forward 2,500 years, and South Africa still plans for and invests in “Smart Cities” – the cities of the rich with fast unlimited broadband everywhere, while cities or suburbs of the poor, like Khayelitsha and Nyanga in Cape Town, Alexandra and Diepsloot in Gauteng, Alfred Nzo and Amathole in the Eastern Cape, UMzinyathi and uMkhanyakude in KZN, Vhembe and Mopane in Limpopo, and many more, continue to grow and fester in increasing and inescapable poverty traps. Fast unlimited broadband access is in theory easily available in these “cities of the poor”, but is neither affordable nor useable by the poor due to factors beyond their control.

The key concept is that extreme inequality is a universal source of “Factions” as stated by Plato, translated into “stasis” from ancient Greek, implying high potential for civil war, or civil disintegration which Plato considered even worse than war. Are there any parallels with South Africa’s political factions, which have direct influence on the growth trajectories of both country and WAPA members?

- Plato’s wisdom, interpreted and discussed liberally after his death by his student and friend Aristotle, has become the subject of biased interpretation in the modern ICT misinformation to suit current highly skewed global economic models: *“The worst form of inequality is to try to make unequal things equal”* – implying that inequality is natural and must therefore be promoted to support the wealthy. Most credible ancient and modern philosophical thinkers accept the reality of naturally inherited inequalities like genetically inherited human defects, countered by promoting “nurturing” societal forms and processes to minimise their impacts on societies and individual qualities of life.
- The increasingly popular misinterpretation of Aristotle’s quotation has been judged a “misattribution” by wikiquotes amongst many others, and serves to introduce a growing level of concern by the world’s leading economists and social scientists, about a deadly growing conflict between Capitalism, the world’s preferred economic and social growth model, and Democracy, the world’s preferred socio-political order.
- An increasing number of anthropologists and other human behavioural scientists, including economists, are “unearthing” huge quantities of evidence that ancient societies acknowledged nature’s inequalities, but reversed their impacts by fiercely enforcing “nurturing” to sustain fully egalitarian societies (see e.g., [“Unfreezing the ice age: the truth about humanity’s deep past”](#) – David Graeber, 2021). Many thought leaders today are asking: Can the value systems of these now extinct ancestral societies be restored in this high-tech age?
- Key amongst these economists, who all feature prominently in the world’s leading capitalist thinktank, the World Economic Forum (WEF), include: [Amartya Sen](#), [Joseph Stiglitz](#), [Paul Krugman](#), [Paul Romer](#), [Esther Duflo](#), [Abhijit Banerjee](#), [Yanis Varoufakis](#), [Paul Mason](#), [Thomas Piketty](#), [Guy Standing](#), and many more. A simple “Google Search” against each name will provide vital enlightenment which can/must help the formulation of sustainable responses to all SDG challenges.
- Fast forward again some 2,400 years from Plato and Aristotle to historian [Walter Scheidel’s imagery of the four horsemen of the inequality apocalypse](#), a highly disturbing and provocative masterpiece *“The Great Leveler”*, discussed in slide 6 of Wapoloza 2019 presentation, reinforced by the devastating COVID-19 global pandemic, and now by the violent conflicts in today’s world which threaten even those developing countries that are not directly involved in the conflicts.

The economic, behavioural, political, and social philosophies and theories that define South Africa’s developmental challenges, and the world’s social-economic-political orders, are critical – but – WAPA members are neither philosophers nor social scientists, no matter how aware of, or knowledgeable they may be, of the underlying disciplines. WAPA members are part of the problem by merely being citizens and/or residents of South Africa. For the same reasons, WAPA members must also be part of the solutions to South Africa’s complex challenges – they have the competencies and motivations to add great value to the required solutions. The ICT networks and services which form the core of WAPA businesses can/must be positioned to powerfully serve the WAPA members’ economic self-interests, and the nation as a whole through mass access to essential information and knowledge that their ICT businesses and technological networks enable.

The complexity must be faced and addressed – failure must not be an option.....

SLIDE 4

What happens to WAPA, its members, their families, their businesses, if South African Society, Economy, Politics, Environment Melts Down? Too Ghastly to Contemplate???

Historical Reminders:

- [President John Vorster, 9 Dec 1974](#): “The alternative (to a Rhodesian Settlement) was ‘too ghastly to contemplate’” – Zimbabwe was born
- [SACC Sept 2008](#): “Recalling or Impeaching President Mbeki would lead to political and economic collapse which was ‘too ghastly to contemplate’” – President Zuma era was born – Radical Economic Transformation?
- [BusinessDay Oct 2019](#): “The ANC government’s hopeless inability to cope with SA’s deteriorating financial and socioeconomic circumstances is ‘too ghastly to contemplate’” – State Capture became a reality?
- [Daily Maverick, 24 Jan 2022](#): “Believe me, Helen (Zille), apartheid and those Broederbond cadres were the alternative that was ‘too ghastly to contemplate’” – Broederbond faded into obscurity...

WAPA 2022 to 2030: What would be “too ghastly to contemplate”?

What can WAPA do about it? Or to survive with it?

The above is a very short summary of the Politics that define South Africa’s growth with Human Dignity – The next slides introduce summaries of the details.

WAPA members have very little direct influence on the political dynamics of South Africa, but as citizens and residents, they will be victims of all national political failures and setbacks. WAPA members, like all other ICT service providers in the country, have potentially significant positive impact on the nation’s political development and maturity, through access to the requisite developmental information and knowledge that can be derived from the networks and services they offer.

SLIDE 5

The growing levels of nationalism in fully developed western countries, many bordering on fascism and racism, also rising alarmingly in emerging economies, is a matter of great concern that many think may trigger Einstein’s speculation. The “Arab Spring” which exploded into a bloody regional conflict with tentacles reaching far beyond the Middle East started in 2010, as a direct result of extreme inequality, poverty and unemployment. The Arab Spring continues to threaten the world order in 2022. The Arab Spring also inspired one of the Internet’s Founding Fathers, Vinton Gray Cerf, to comment as follows in 2012:

THE WAPA WORLD TODAY
A very dangerously troubled home country and world

Today’s Realities in a very Dangerous World:

- “I am not sure with which weapons the third world war will be fought, but in the fourth world war they will fight with sticks and stones”, attributed to [Albert Einstein in April/May 1949](#).
- March 2022: [Volume 17 of the Engineering and Technology Magazine](#). The global nuclear arsenal: “13,000 nuclear warheads ready to be unleashed”: (1) **Russia**: 6,257, Operational 4,587; (2) **USA**: 5,600, Operational 3,700; (3) **China**: 350, Operational 350; (4) **France**: 300, Operational 300; (5) **U.K.**: 225, Operational 120; (6) **Pakistan**: 165, Operational 165; (7) **India**: 160, Operational 160; (8) **Israel**: 90, Operational 90; (9) **North Korea**: 45, Operational 45”. A very small fraction of these are needed to destroy the world we know. The chosen antidote is “**MAD**” ([Mutually Assured Destruction](#)) – “*If you kill me, I will kill you even more!*”.
- Einstein may be proved wrong – climate change may get us all before the nuclear holocaust. The [Climate Catastrophe in Pakistan](#) occurring right now may trump Pakistan’s nuclear capability.
- But then, there is Russia and Ukraine, and a potential disaster unfolding in [Zaporizhzhia](#).....

“FROM the streets of Tunis to Tahrir Square and beyond, protests around the world last year were built on the Internet and the many devices that interact with it. Though the demonstrations thrived because thousands of people turned out to participate, they could never have happened as they did without the ability that the Internet offers to communicate,

organize and publicize everywhere, instantaneously” (<https://www.nytimes.com/2012/01/05/opinion/internet-access-is-not-a-human-right.html>.)

Given that all actual and wannabe autocrats and despots who hide their ambitious drives towards fascist-like world orders, all tend to target internet access first to promote their destructive and disruptive agendas, and then to attack and disrupt the internet when mass public objections and disagreements arise, proves the power of the internet and related ICT infrastructures, for both good (spreading democracy and human freedoms), and bad (spreading falsehoods and growing levels of highly destructive misinformation). Mass access to both the good and the bad kind of information and knowledge, coupled with high quality education that enables recognition of both, is the safest antidote to these dangerous global trends.

The WAPA business models and processes can deliver the access networks for both mass education, and the capacity and capability to overcome the destructive abuse of humankind’s most potent developmental tool – the internet. But WAPA’s products and services must be supported, expanded, and deliberately positioned to do that first, as a direct and potent compliment to all other similar services across all national efforts to promote human development with dignity, and to secure humanity’s living environment.

SLIDE 6

A Review of Key Sustainable Development Challenges South Africa faces

- The Sustainable Development Goals (SDG) define the numerous multidimensional developmental challenges faced by South Africa
- They are a continuation of the Millennium Development Goals (MDG) that came before them (years 2000 to 2016), during which South Africa achieved just 19 of the 84 MDG targets which the country set for itself
- The SDG 2030 global initiative is directly related to the National Development Plan 2030 – which lies dormant in 2022. Most NDP and SDG targets will not be met by programme end 2030
- The most immediate, and therefore urgent challenges for South Africa, are the “triple threats” of Inequality, Poverty and Unemployment

Inequality is known to be the root cause of global economic decay and socio-political strife the world over

All SDGs, MDGs, NDPs, and related indicators of human development, are fully interrelated, integrated, and interdependent – none exist in isolation from any other. A holistic approach to their amelioration is therefore vital, and this can best be provided through mass access to the information and knowledge which the core businesses of WAPA members can provide. WAPA’s business processes must become the means to the desired ends – they

cannot be the ends themselves.

SLIDE 7

Policies are necessary, but policies of all qualities are rendered useless if they are not implemented. A South African example of good policy formulation with poor implementation is captured in a presentation to DCDT’s proposed amendment of the Electronic Communications Bill of 2017, posted online by [Dominic Cull of Ellipses here](#). The presentation includes references to the situation in Japan and South Korea, where policy making is directly related to action and implementation. Action and implementation often precede policy formulation and legislation. In some cases, strategies are developed and operationalized, and if successful, policies are crafted from them, so that national policies are seen to be effective and sustainable in their virtuous circle modes of feedback and revision. Most such strategies in Japan and South Korea meet or exceed their designed expectations even before the national policies are promulgated from them.

INEQUALITY - 1
Local Knowledge – What We Know

S.A. Government 2020: “Reducing Inequality in South Africa”:
“Irrespective of the indicator used to measure inequality, South Africa is ranked as the most unequal society in the world” – **Govt. Knows!**

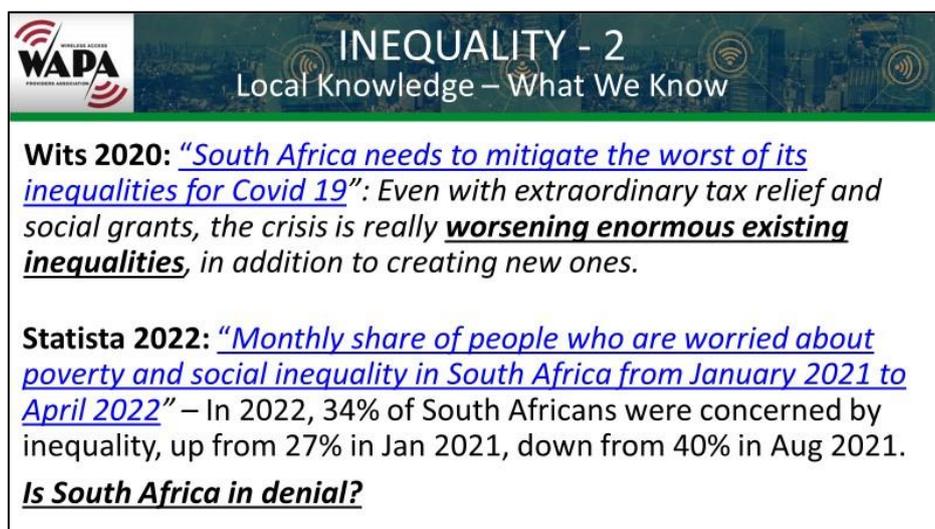
UCT 2021: “Inequality in South Africa is a ‘ticking timebomb’”: “Short of massively disruptive social change, **in the form of revolutions**, what we need is a policy system which thinks systematically and substantially.”

Comment: Has ANY Policy Anywhere in the world fixed any problem without concerted highly focused action?

In South Africa, the national broadband policy, [SA Connect](#), was completed and published on 6 December 2013, with very specific targets, e.g., 50% of all schools connected to the internet at 10Mbps by 2016, and 100% at 10Mbps by 2020. On April 2021, the South African Government published its National Education Infrastructure Management System Report (NEIMS21) which stated that by April 2021, just 20% of South Africa's schools were equipped with internet access for education and learning (NEIMS21 - <https://www.education.gov.za/Portals/0/Documents/Reports/NEIMS%20STANDARD%20REPORT%202021.pdf?ver=2021-05-20-094532-570>.)

The SA Connect National Broadband Policy has yet to deliver as planned nine years after its publication. An excellent national policy was rendered ineffective by grossly ineffective implementation. Can WAPA help?

SLIDE 8



Wits 2020: *[“South Africa needs to mitigate the worst of its inequalities for Covid 19”](#): Even with extraordinary tax relief and social grants, the crisis is really **worsening enormous existing inequalities**, in addition to creating new ones.*

Statista 2022: *[“Monthly share of people who are worried about poverty and social inequality in South Africa from January 2021 to April 2022”](#)* – In 2022, 34% of South Africans were concerned by inequality, up from 27% in Jan 2021, down from 40% in Aug 2021.

[Is South Africa in denial?](#)

WITS 2020: [Imraan Valodia](#), and [David Francis](#), both highly respected academics at the [University of the Witwatersrand](#), observed right from the start of their highly informative paper, that:

“The (coronavirus) lockdown has illuminated how the spatial, economic and social inequalities which were characteristic features of the apartheid period have persisted in post-apartheid South Africa. Media coverage has shown inequalities in

access to transport, shops, COVID-19 testing, and the very different ways the lockdown has been enforced and policed in different communities”.

The authors introduce the term “Precariat” into their discussion concerning the devastating impact of the coronavirus pandemic on South Africa’s labour market. Collins English Dictionary defines “Precariat” very simply as “*the class of people in society who lack a reliable long-term source of income, such as permanent employment*”. This simple definition hides a massive swathe of potentially dangerous societal complexity, best unravelled by Professor [Guy Standing](#) of the University of London in his numerous publications and interactions with the WEF, e.g., his introduction of the concept at WEF 2017 - An Insight, An Idea with Guy Standing, <https://www.youtube.com/watch?v=N5n4j8-zUE4>.

How does the concept of the Precariat fit into the WAPA fraternity, their dreams and visions, their ambitions, their successes and sustainability, and the barriers they must face in all of them? This question raises further questions, which WAPA members do not in general have the time nor direct interests to address – they are, or must, be too busy running mostly small businesses under difficult environments to overcome the threats that the Precariat concept imposes on their businesses and lifestyles:

- Who are the precariat, and what are their responses to the global economic ideological predicaments they find themselves in?
 - The evidence, with or without the restrictions on definition of the term by Professor Guy Standing, are the class of workers involved in the “Gig” economy, generally self-employed, some in the informal labour economy, some struggling for survival like the Uber drivers striving to stay safe from the violent onslaught of their fellow formal taxi drivers who face the same challenges?
 - Can some, or all of WAPA members fit into the “Precariat” classification? Why, and what are the consequences and impacts?
- In one of Professor Standing’s articles written for the WEF, his depiction of the precariat was an “*emerging mass class, experiencing falling real wages, chronic economic insecurity and **growing anger**, in a context best described as rentier capitalism, rather than free-market capitalism. Revolt is in the air, and is justified, even if we may detest the forms it is taking, because the system is “rigged” excessively in favour of the rentiers, those who earn income from property, physical, financial or intellectual*”.

- In the WEF debate on the subject, Professor Standing avers that the precariat is a “*new dangerous class*” of activists with “*no occupational identity or narrative to give to their lives*”, in which for the first time in human history, “*a growing number of people have education above the level of labour they can expect to obtain*”. The responses are as varied as the social classes from which these new “Precariat” have emerged:
 - In a growing number of fully developed countries, Italy and Sweden are the most recent examples, these new social classes seek succour from the emerging populist, usually far right nationalist ideologies with strong autocratic and racist undertones;
 - In South Africa, the hopelessness and seething anger resulting from the extreme socioeconomic inequalities and resulting poverty and joblessness, lead to utopian dreams of “[Radical Economic Transformation](#)”, with dangerous undertones of xenophobia, “de-racialized” in the term “[Afrophobia](#)”, and the rise of movements like “[Operation Dudula](#)” and the devastating July 2021 Civil Unrest ([hyperlink to official; Government Report](#)) and similarly populist movements that result in xenophobic responses and movements like them.

Clearly South Africans, and especially their small business entrepreneurs like the WAPA fraternity, and much of the developed and developing world, live in very dangerous times.

But, what can WAPA members do about it all?

The simple answer is nothing directly. But, WAPA members can contribute immense value to the search for answers to the national conundrums, by positioning their ICT products and services to serve the significant population of local and international experts and researchers in economics and the full range of social sciences, especially education targeting the poorest children in the land.

All universities in South Africa have the academic competencies to develop the understanding of these complex issues, and to develop solutions even within the generally hostile socio-political environment. Many of these academics have published vital papers and reports on these issues, but application and implementation of their recommendations remains elusive.

The local experts are fully supported by a growing number of concerned globally celebrated experts like Professor Guy Standing discussed above, and all the Nobel Laureates and other leading economists listed in Slide 3 on page 2 of this discussion document. They are fully supported by all the A4AI partners listed in Slides 25 to 28 of this WAPALOZA presentation.

The major concern expressed by many world-leading economists is the growing conflict between natural bedfellow ideologies; capitalism on the one hand, and democracy on the other. Capitalism in its neoliberalism excesses seems to be on a dangerous path of destroying democracy, an opinion held by a growing number of economists, including the mighty World Bank which presented an opinion in June 2016, on “the ‘[disquieting](#)’ drawbacks of free-market dogma”. Some highly respected economists like Yanis Varoufakis who suggests that “[Capitalism has become a new techno-feudalism](#)”, join historians like Yuval Noah Harari as he warns the world of growing new technology-driven inequalities in a “[blistering warning to the WEF in January 2020](#)”, all focussing on the impact of the techno-sector, including the internet, on these growing concerns.

The recommendations of the A4AI group and its more than 80 exceptionally influential members, as discussed in Slides 25 to 28 of this presentations, offers suggestions of how WAPA can do this:

Support the massive buildout of public access broadband platforms as recommended by A4AI, a recommendation supported by the whole world including South Africa. These broadband platforms can and must support all academic, and especially ethnographic research that will add value to the nation and its small businesses like WAPA, as well as providing the connectivity for the unconnected masses in South Africa.

Much more discussion of this extremely complex issue is required.

STATISTA 2022: Only 34% of South Africans are concerned by the historically proven threat of inequality? Meriam Webster Dictionary defines “denialism” as “*the practice of [denying](#) the existence, truth, or validity of something despite proof or strong evidence that it is real, true, or valid*”. Up to 25% of the South African population lost their lives due to HIV/AIDS denialism during the global pandemic, rising to 40% of all deaths of South Africans aged between 15 and 49 years in 2020 alone (<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1172985/>.)

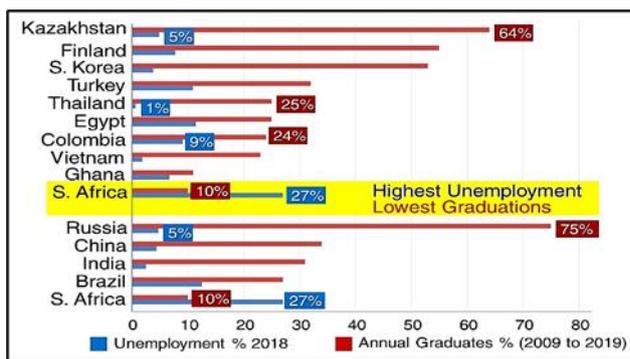
Denialism is deadly, and denialism of the threat of inequality is a historically proven deadly phenomenon that has led to wars and state failures.

SLIDE 9: with added international benchmarking from Page 19 of [ICT4SDG8](#)

WAPA
INEQUALITY - 3
 Local Knowledge – What We Know

Amnesty International 2020: “South Africa: Broken and unequal education perpetuating poverty and inequality”:
 “According to the Department’s own statistics for 2018, out of 23,471 public schools, 20,071 have no laboratory (86%). Furthermore, 18,019 have no library (77%), while 16,897 (72%) have no internet”.

Is this South Africa’s “Achilles Heel”?



Yes, this is most certainly South Africa’s Achilles Heel. Schools serving the wealthy, mainly white population segments in the country rank amongst the best in the world, while up to 80% mainly black South African children, educated in the nation’s “black schools” with extremely poor facilities including hygiene, struggle to acquire reading skills by grade 4, according to the most recent international reports on education in which South Africa participated.

WAPA is most certainly not responsible for this dismal state of affairs, but their products and services can be positioned to make a huge difference – outside the formal educational systems which may require up to 100 years to repair.

If WAPA can find a way of doing this, it will have the support of all South Africans and the world in general, through e.g., the immense membership of A4AI.

SLIDE 10

WAPA
INEQUALITY - 4
 Local Knowledge – What We Know

STATS SA 2020: “HOW UNEQUAL IS SOUTH AFRICA?” –
 Most recent data for 2015 – GINI Coefficient was 63!
 A “Digital” census conducted by STATS SA in 2022 - nearing completion - results expected Q2 2023.
 The International Alert Line for the GINI Coefficient is 40!

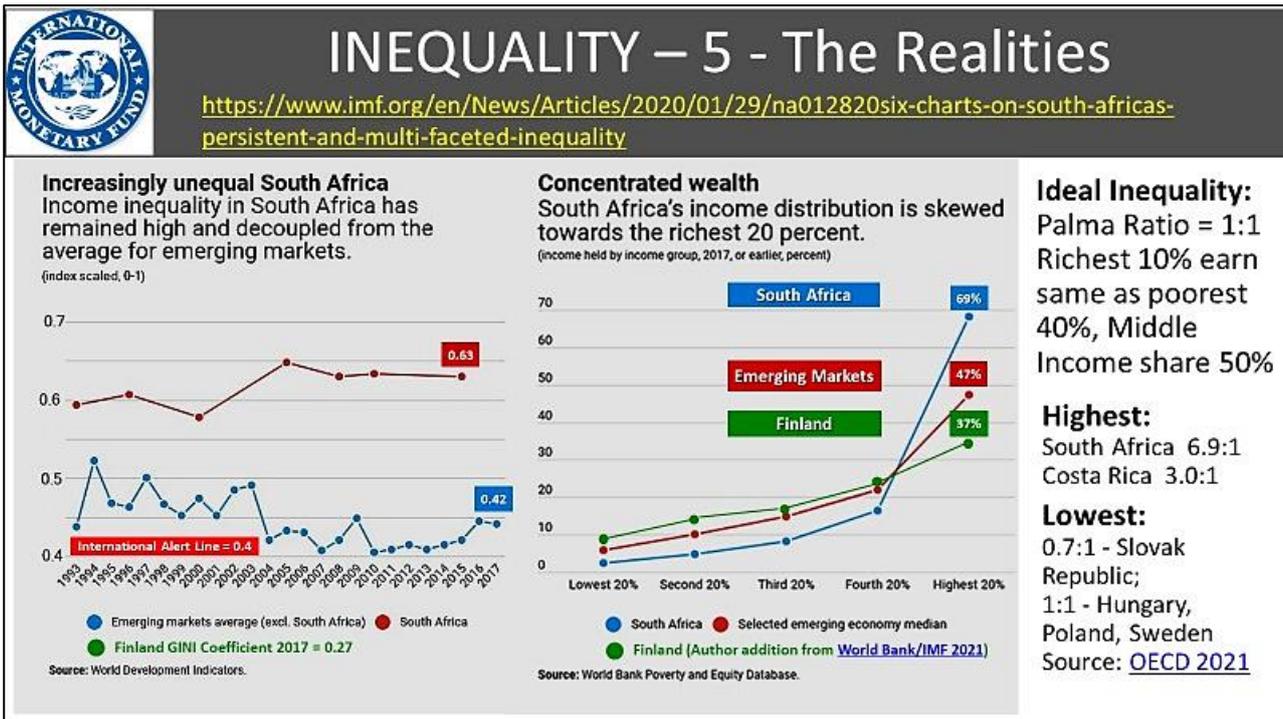
Can the world’s highest inequality be reversed by Digits? Can the vital “Digital Census” be successful, with up to 76% South Africans unable to access, afford or use these “digits” productively?

Statistics South Africa remains the most relevant source of developmental data and statistics in the country, but it too suffers from the limitations set by the nation’s slow economic, political and social evolution – the same factors that makes the institution’s activities and results so important.

The latest efforts by STATS SA in preparing credible yet vital growth statistics through its current national census are frustrated by the same growth barriers that impact the nation – the massive so-called “digital divide” that renders its “digital population

census” potentially less reliable.

How can WAPA services, which have the potential of reaching the masses of economically and information marginalized populations, be positioned to help STATS SA to achieve its national mandate?

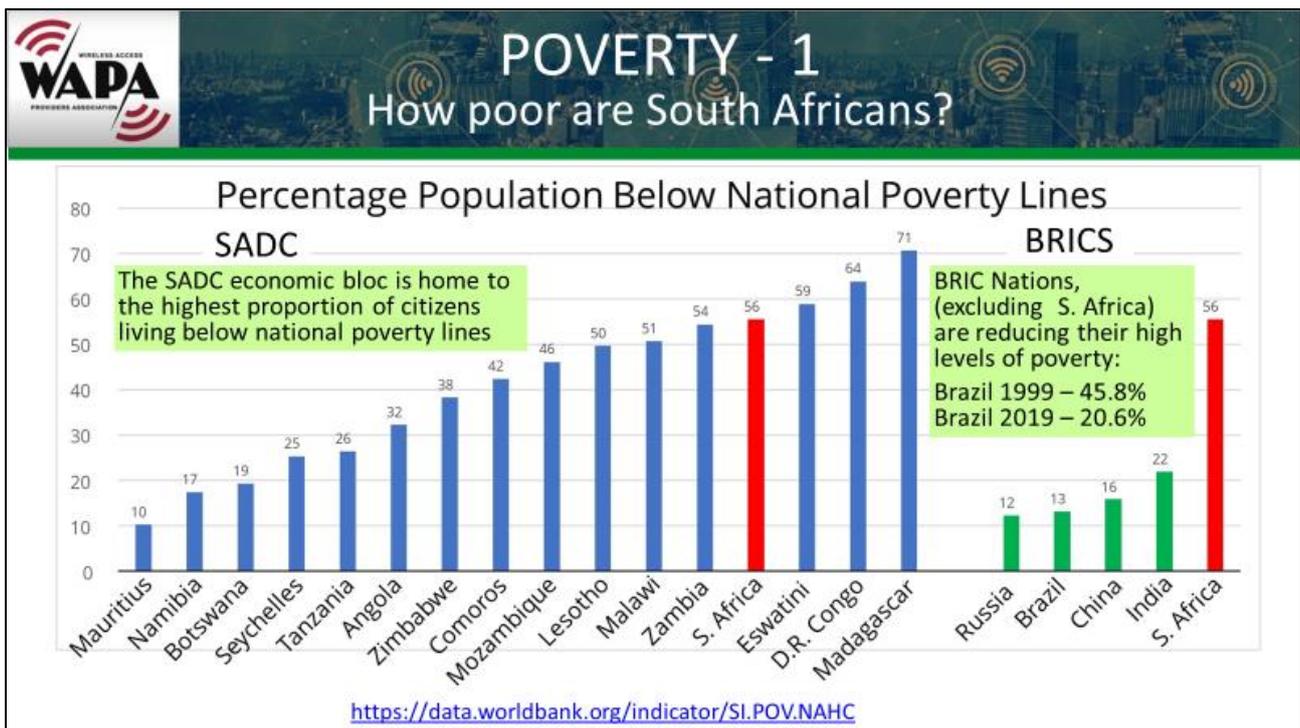


“South Africa suffers among the highest levels of inequality in the world when measured by the commonly used Gini index. Inequality manifests itself through a skewed income distribution, unequal access to opportunities, and regional disparities. Low growth and rising unemployment have contributed to the persistence of inequality”.

This opening statement by the International Monetary Fund (IMF) in its highly informative country report [“Six Charts Explain South Africa's Inequality, January 30, 2020”](#) tells the whole story of South Africa’s dangerously provocative level of inequality. Instead of just 34% of South Africans expressing their concern over this inequality (Slide 8), ALL South Africans should be concerned, history of the human species has shown conclusively that multidimensional inequality generally leads to immense social disruption and state failure.

The IMF report verifies that South Africa’s inequality in 2017, as measured by the GINI Coefficient, was a whopping 167% of the average for emerging markets.

A comparison to one of the most equal countries on earth, Finland, has been added to the IMF charts, showing that the challenge can be ameliorated. Finland, although having a much smaller population, faced the same and worse levels of inequality and deprivation as South Africa just 100 years ago, and reshaped its society, especially its education systems, to become the current global leader in both inequality and education.



This chart, and the youth unemployment chart in Slide 14, provides somewhat unexpected results, which have, and will continue, to raise doubts in the minds of influential decision-makers who have not found the time to think through and analyse the statistics related to inequality and poverty.

The question that has arisen frequently in discussions with such decision-makers is: “How can e.g., Tanzania, Mozambique, and Malawi have lower levels of poverty than South Africa when they are so much poorer than South Africa?”

The explanation, which needs to be understood by many if South Africa is to resolve its severe inequality and poverty challenges through the potent statistical tool, is that the extreme levels of economic inequality in South Africa contributes greatly to this confusion. If a country has very high levels of income inequality, the wealth of the elites shapes the image of the country, while masking the extreme poverty within the nation. The following adds to this phenomenon:

- Differences in the cost of living in each country, which are directly related to each country’s level of economic development, defines the poverty lines against which poverty is measured.
- For example, Tanzania’s economy falls within the classification of “Lower-Middle-Income”, where the minimum cost of living, below which Tanzanians will be classified as poor, is US\$3.65 PPP per day (up from US\$2.15 PPP, and US\$1.90 PPP before it, the revised low-income international poverty lines), approximately equivalent to ZAR785 per month in South African currency terms. According to the data above, 26% of Tanzanians are obliged to live below this poverty level.
- In South Africa on the other hand, the economy has developed to an “Upper-Middle-Income” economy, where the minimum cost of living, loosely the poverty line, is US\$6.85 PPP per day (2022 levels), or approximately ZAR1,473 per month ([STATS SA has set the UBPL to ZAR1,417 for 2022](#)). According to the World Bank and Statistics South Africa, approximately 56% of South Africans survived below the national poverty line in 2015. New reports suggests that this may have risen to 76% of the population after inflationary pressures, economic performance, and the impact of the coronavirus pandemic.
- In comparison with developed economies, the poverty line in (say) Denmark is set at US\$30 PPP per day. This poverty line is equivalent to South Africa’s ZAR6,453 per month, nearly five times South Africa’s Upper Bound Poverty Line for 2022. The poverty level in Denmark was estimated at 12.1% in 2021.

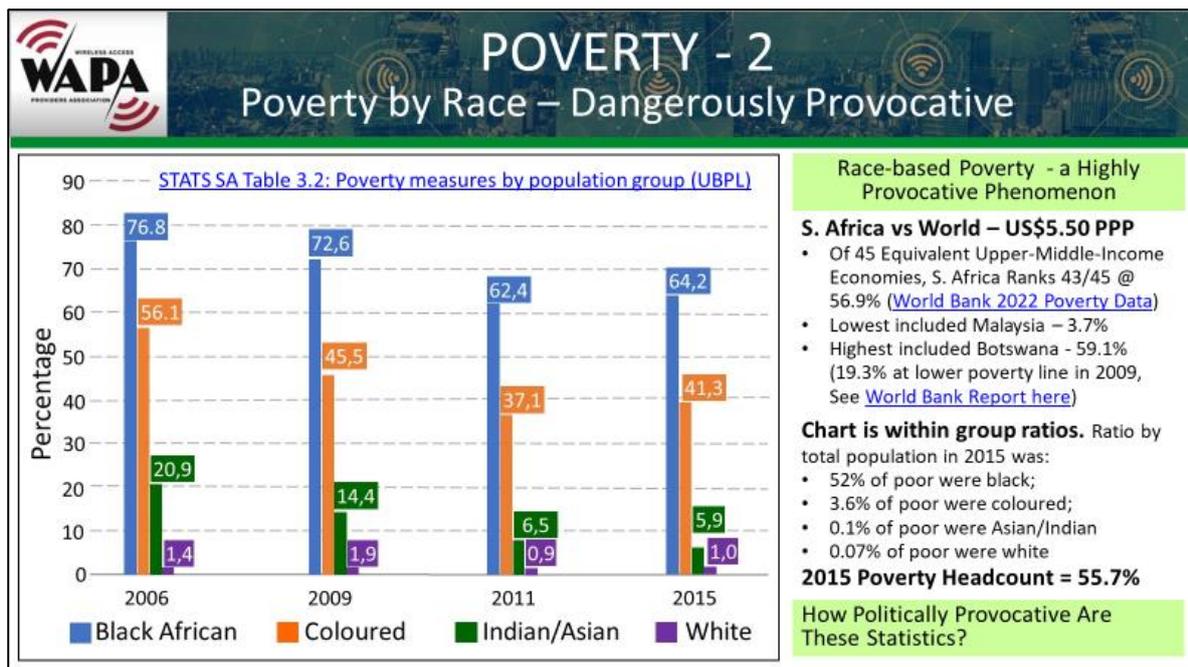
While the SADC benchmarking chart above is a very useful planning tool, it is necessary to understand that until nations are willing to invest in compiling and publishing accurate data, the actual statistics will remain approximate indicators of potential problems. The paucity of data also masks the seriousness of these problems, the development of effective

strategies for the mitigation of the problems, and the enablement of the mitigation strategies, even within this level of approximation.

Key references to enable the above analyses include:

- World Bank: [Updating the international poverty line with the 2017 PPPs](#)
- World Bank 2022 Economic Classifications: <http://databank.worldbank.org/data/download/site-content/CLASS.xlsx>
- World Bank Poverty Headcounts at National Poverty Lines: <https://data.worldbank.org/indicator/SI.POV.NAHC>
- World Bank Purchasing Power Parity Conversion Factors: <https://data.worldbank.org/indicator/PA.NUS.PPP?locations=ZA>

SLIDE 13



The [Mid-year population estimates of 2019](#), published by Statistics South Africa (STATS SA), “*Table 1: Mid-year population estimates for South Africa by population group and sex, 2019*” states that of the 58,775,022 people that lived in South Africa:

- 47,443,259 (80.7%) were “Black African”
- 5,176,750 (8.8%) were “Coloured”;
- 1,503,007 (2.6%) were “Indian/Asian”;
- 4,652,006 (7.9%) were “White”

The word “race” does not appear anywhere in the document, perhaps in acknowledgement of the fact that “race” is not a scientific construct - it cannot be explained by any branch of science – it is strictly a social construct:

- a. [Luigi Luca Cavalli-Sforza](#), born in Italy on 25 January 1922, spent the greater part of his 96-year-old existence demonstrating through genetic analyses that race differentials amongst humans had no scientific basis. Four years after the great scientist’s death, his country Italy seems to have reverted to a historically discredited [neo-fascist form of government](#). The social nature of humans has a tendency to “[Trump](#)” scientific evidence every time.
- b. There is a vast body of recent scientific evidence, published by scientific luminaries like Cavalli-Sforza, world renowned genetic scientist [J. Craig Venter](#), South Africa’s own eminent scientific family which includes [Phillip Valentine Tobias](#), [Christopher Henschilwood](#) and many more, all “proving” that race and racism has no basis in science, and going even further to “prove” that all living Homo sapiens, irrespective of their nationality, skin colour, hair and eye textures, are all genetically African, with South Africa itself being one key central location of that genetic origin. Swedish Geneticist [Svante Pääbo](#) was awarded the 2022 Nobel prize in Physiology and Medicine for unravelling the DNA of pre-human ancestors, providing further genetic evidence that even the so-called European pre-sapiens hominids, the Denisovans and Neanderthals, were also ancient emigres from Africa, a likely ancestral

fossil was found in [Kabwe, Zambia, dated some 300,000 years ago](#). The modern human craving for superiority seems to be insatiable.

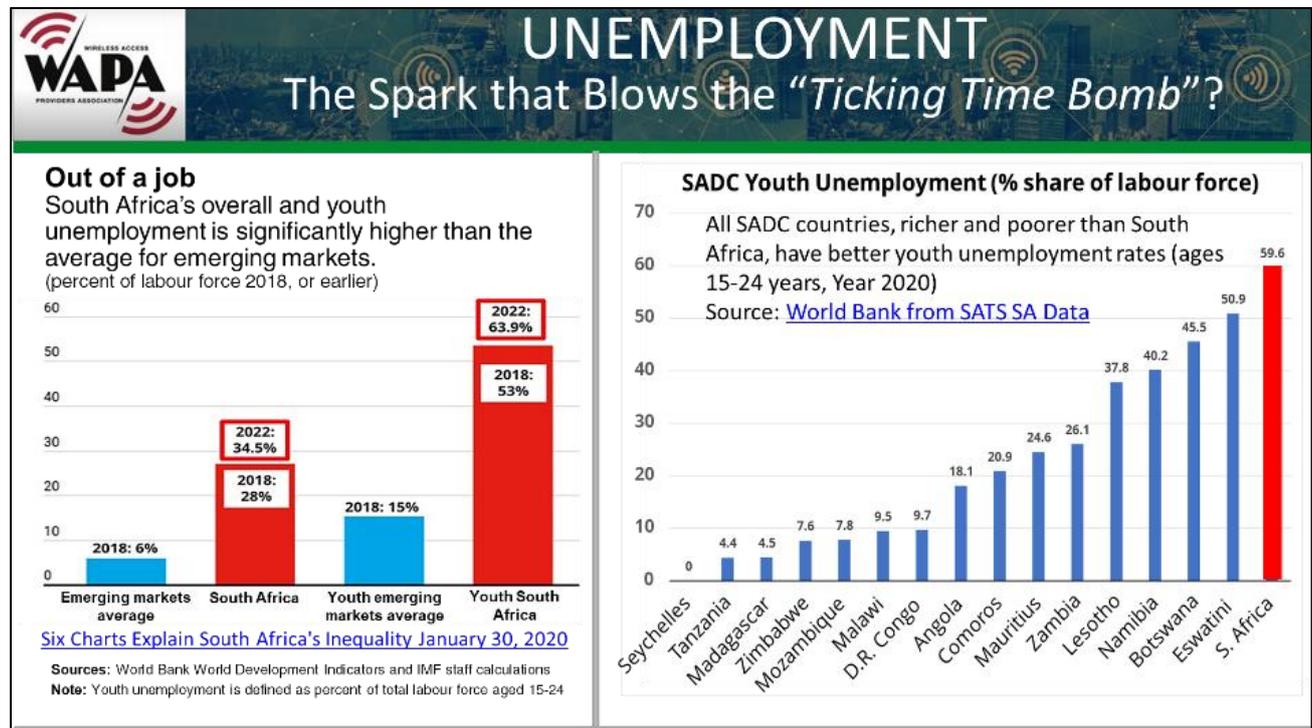
- c. The internationally respected scientific journalist Angela Saini, an engineer by profession, and of Indian/Asian origin as South Africa would have classified her, expresses strong views about the power of the racist social construct over scientific fact. In her 2019 book, "[Superior: The Return of Race Science](#)", Angela argues that even with the deep scientific knowledge of our common origins, even science continues to embrace the toxic origins of racism.

South Africa is not immune, as verified by Statistics South Africa in the chart above, and the Government of South Africa which insists on retaining the race-based divisions of the population instead of tackling the scourge of racism at source – the scientifically flawed habit of identifying our species along racial lines. There is enough demonstrable scientific evidence that skin pigmentation, hair texture and colour, and other human attributes like eye colour, are superficial identification markers determined by environmental factors like the level of solar radiation, and diet. Humans living in high UV environments like those found in Africa, who live on high vitamin D diets, tend to be dark skinned, while those who inhabit low UV radiation geographical areas, and who survive mainly on relatively low vitamin D diets, tend to have low levels of pigmentation.

Education is clearly central to defeating the scourge of racism, however the social construct is so deeply entrenched that much more than the 100-years stated by Chinese Philosopher Guan Zhong about 2,700 years ago may be needed. But, if the process is not started now, the challenge will never be resolved, and humanity will pay a very heavy price for such failure.

WAPA and its members cannot change the impact of racism in South Africa, nor can the national educational system, given its statistically dismal performance in its currently form. BUT, WAPA services can help, their products and services are those that can, if positioned to do so, change the hearts and minds of Homo sapiens to reduce or remove racial stereotypes, and steer the species back to its ancestral egalitarian status, even in this high-tech age.

SLIDE 14



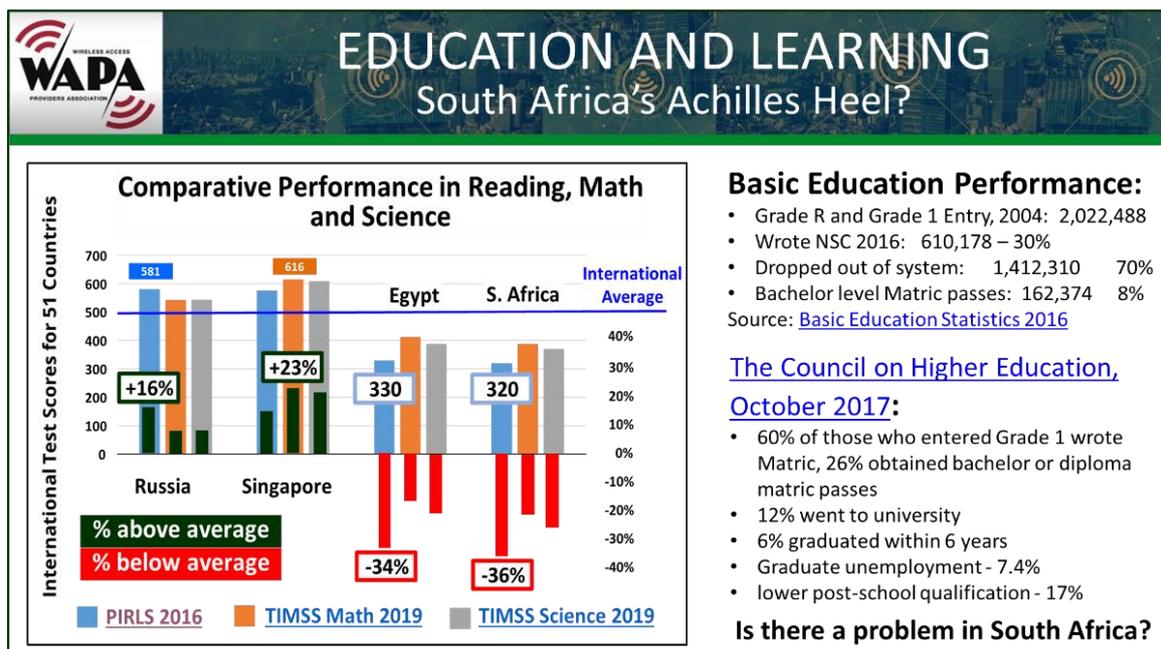
These charts are derived from the IMF document "[Six Charts Explain South Africa's Inequality](#)", published on 30 January 2020, from which the emerging market benchmarks are drawn. The SADC youth unemployment benchmarks are derived from the World Bank's youth unemployment database, accessed via "[Unemployment, youth total \(% of total labor force ages 15-24\) \(modeled ILO estimate\)](#)". The unemployment data for 2022, appended to the IMF charts, were derived from the most recent [STATS SA 2022 data](#). The rise in youth unemployment in South Africa from an already

world record height of 53% in 2018, to an unprecedented world record of 63.9% in 2022, must be of great concern to all South Africans and their supporting partners.

The question that must arise from the SADC benchmark is how significantly poorer SADC nations like Tanzania, Madagascar, Mozambique, and even the Democratic Republic of Congo, are able to employ their youth in spite of their high national poverty levels? Could it be that the societal relationship in these countries retain some remnants of community and people-wide caring and sharing that shaped human social relationships in the past, most of which South Africans have largely lost as the globally preferred free market economic ideologies began to progressively dominate their social formation and development? Human behavioural and related social scientists are best equipped to answer these questions.

This discussion strongly suggests that the ICT services that WAPA members are able to offer can, perhaps must, be positioned to contribute towards amelioration of South Africa’s socio-political-economic crises. The key question is HOW? By merely posing this question, and seriously researching a range of possible responses, WAPA members can contribute towards the nation’s development challenges even within their vital mandates to build high-growth sustainable businesses for themselves and their families.

SLIDE 15



This self-explanatory chart paints a dismal picture of South Africa’s educational outcomes.

In the *Progress in International Reading Literacy Study (PIRLS 2016)*, latest 2019/2020 results expected end 2022), South Africa ranked last of the 50 countries that voluntarily participated in the tests, with a national average score of 36% below average.

In the *Trends in International Mathematics and Science Study for 2019 (TIMSS 2019 - Math)*, South Africa ranked 56 out of 58 participating countries, scoring 25% below the 58-country average score. Similarly in the International Results for Science (*TIMSS 2019 – Science*), South Africa ranked 56 out of 58 participating countries with an average score 35% below the 58-country average.

The key hyperlinks supporting the chart above are:

1. Basic Education Statistics 2016: <https://www.education.gov.za/EMIS/StatisticalPublications/tabid/462/Default.aspx>
2. The Council for Higher Education Report of October 2017: [https://www.che.ac.za/sites/default/files/publications/BrieflySpeaking \(2\) Educational pathways.pdf](https://www.che.ac.za/sites/default/files/publications/BrieflySpeaking%20Educational%20pathways.pdf)
3. PIRLS 2016 Results: <http://timssandpirls.bc.edu/pirls2016/international-results/pirls/student-achievement/pirls-achievement-results/>

4. TIMSS Maths results 2019: <https://timss2019.org/reports/achievement/#math-4>
5. TIMSS Science results 2019: <https://timss2019.org/reports/achievement/>

The above dismal educational outcomes are a direct result of South Africa's extreme socioeconomic inequalities – a few world-class schools in the country serving about 24% of nation's children, with exceptionally poor-quality basic education in schools serving nearly 70% of the nation's children living in extreme poverty.

A disturbing racial factor in education was inherited from the legacy of apartheid, excellently stated by one of South Africa's leading Educationalist, [Professor Naledi Nomalanga Mkhize](#) in a disturbing yet highly informative video documentary "[Some children are more equal than others](#)":

"De-racializing the South African school system did not solve the problem. De-racialization is not transformative; what is transformative is changing the structural problem of the way the school system was set up in the first place. And that was the problem of black schools, which are the majority, being schools of poverty and impoverishment, both intellectually as well as financially and economically. So, what should have happened was that we should have gone to the black schools first, and turned them into beacons of hope."

Can WAPA ICT services be positioned to resolve the national challenges shown in the charts above, and address the concern so eloquently expressed by Professor Mkhize?

SLIDE 16

Other Social, Economic, Political Challenges

1. **SDG3 – Health of South Africans:** [Medical Aid: 9.9% black South Africans, 72.9% White South Africans covered](#): If you are black and poor – don't get sick, you may die waiting in the queue at Chris Hani Baragwanath or Charlotte Maxeke Hospitals while waiting for a doctor or nurse. See also [ICT4SDG3](#) with reference to troubling [8-part documentary video by Al Jazeera](#)
2. **SDG4 – Education** – the root of all South Africa's problems – See also [ICT4SDG4](#). ***A vast population of teachers teaching, a vast population of learners not learning...***
3. **SDG5 – Gender challenges:** Massive challenges, GBV a concern at highest levels of government, resolution elusive.
4. **SDG6; SDG7; SDG13; SDG14; SDG15; and SDG8:** – Water; Sanitation; Energy; Climate Change; Ecological Balance on Land and Water; World of Work. Massive deficiencies in all six SDGs, e.g., residential areas flooded by sewage leaks, Eskom failures, draught and water shortages, biodiversity destruction..... See details from page 63 of [ICT4SDG8](#).
5. **SDG9, SDG10, SDG11, SDG12:** Infrastructure (including ICT) etc.; Inequalities; Cities and Communities; Consumption and production: All major fault lines in South Africa, discussed under SDG8 in [ICT4SDG8](#).
6. **SDG16 and SDG17:** Justice, Peace, Effective Institutions, Partnerships and Coordination to achieve all SDGs. South Africa has major challenges in each SDG, excellent policy, extremely poor implementation (Must include ICT)...

Extremely Complex Challenges: A Holistic approach to SDG programmes needed, discussed fully in [ICT4SDG8](#) – ICT an effective tool at the centre of WAPA activities

The sheer complexity of all seventeen Sustainable Development Challenges, which are all fully interrelated and interdependent, demand a holistic approach for their amelioration. For example, unemployment leads to hunger and poverty, devastating impacts on all other SDGs, including those related to the environment and climate change: starving poorly educated people will have very little capacities or incentives to safeguard the environment if it stands in the way of a meal or other means of survival.

WAPA members, like everyone else who lives in South Africa, and those who wish to help South Africa, will be impacted by all these interdependent SDG setbacks, but they cannot on their own resolve the national challenges. A concerted effort by all, coordinated as best as it can be, is the only long-term solution – there are no quick fixes, no champions, no heroes. The challenges demand full participation by political leaders of all competing ideologies, all stakeholders in government and the private sectors, all academics and related professionals, and most importantly, the victims of all SDG challenges. The coordination necessary is extremely difficult, and has been the cause of numerous failed attempts. "Massification" on a national scale is vital, but the same challenges that need ameliorating, i.e., the triple threats of inequality, poverty and unemployment, and all their SDG dependencies like education, are the same barriers that prevent such massification.

The ICTs, which form the basis of WAPA's prosperity and survival, are vital for this complex coordinating task.



ICT Access and Use in South Africa

Key Statistical Data

- ICTs, by any name, any generation, any technology, have always been known to be the most effective way of sharing information and knowledge for ALL Development over any distance
 - From the [Hydraulic Telegraph of 400 BC](#), through the undated [African Bush Telegraphs](#) that preceded or followed it, the [5,000 km Semaphore Telegraphs](#) of 18th century France, to today's Internet of Everything and Everywhere, ICTs have been invaluable to humankind
- Today, the economic value of ICT seems to have trumped its human value, adding fuel to the fires of inequality – those that already have much get much more through ICT, those that have too little get left behind even more

South Africa's ICT sector is virtually 100% digitized, but up to 76% are unable to afford the transformative and uplifting "digits" they need to escape their poverty traps. In the national ICT industry, WAPA is closest to the point of need. An examination is needed of how WAPA can help to bridge this yawning "**HUMAN**" divide, and remain profitable and viable.

The immense commercial value of ICTs in this technological age demands that we review the fundamental meaning of the term. There is just too much hype, fake news, misleading information, and criminal abuse of one of the most valuable inventions initiated by humankind.

A reminder of the origins and meaning of the term ICT, presented to a conference of the

nation's leading ICT experts and innovative gurus that make up the WAPA fraternity, may seem incongruous, but the current and potential abuse of the technology and its human value renders such a reminder appropriate:

- "I" stands for "Information". The [Cambridge Dictionary](#) offers the simplest definition that covers all competing English language definitions: "*facts about a situation, person, event, etc.*" It is wholly technologically neutral;
- "C" stands for "Communication". [Merriam Webster Dictionary](#) provides the simplest definition of the term, consistent with all other English dictionary definitions: "*a process by which information is exchanged between individuals through a common system of symbols, signs, or behaviour*". Once again, a wholly technologically neutral meaning of the term;
- "T" stands for "Technology". [Britannica](#) offers an elegant definition of the term, shared by virtually all other English language dictionaries: "*technology, the application of scientific knowledge to the practical aims of human life or, as it is sometimes phrased, to the change and manipulation of the human environment*". A useful variant of the definition by the [Collins English Dictionary](#) is: "*Technology refers to methods, systems, and devices which are the result of scientific knowledge being used for practical purposes*", and by Cambridge English Dictionaries: "*(the study and knowledge of) the practical, especially industrial, use of scientific discoveries*".

Interestingly, all definitions of "technology" tend to be technologically neutral themselves. The very first technologies that enabled humans to "communicate" information over distances beyond the limitations of human speech and hearing, may have been cleverly crafted tree trunks with tightly stretched animal hide coverings, enabling pulse code modulation (pulse amplitude and pulse frequency) to relay intelligent information over great distances – over one hundred miles with bush telegraph village-to-village repeaters.

The value of technologically-aided interpersonal communication was recognised at the dawn of human consciousness, and has served humanity well throughout its evolutionary journey.

The ICTs were once referred to as "telecommunications" – the Greek prefix "tele" meaning far, at a distance, and "communications" - Information "communicated" over great distances, in much the same way that the internet, mobile networks of any "G", trans-oceanic submarine cables, and even interstellar scientific research networks. The impressive [James Webb Space Telescope](#), a marvellous application of scientific knowledge of both the analogue and digital kind, is a very recent example. The design and structure of the telescope is clearly analogue, it is made up of physical things, not electronic on/off pulses, although these may have been used to help in its design. The telescope uses analogue parabolic reflectors to capture the infra-red light radiated by very distant stars while they were still in existence, converts these stunning images into digits for processing and transmission back to earth over 1.5 million kilometres of naturally analogue radiofrequency spectrum, digitally modulated to retain the invaluable analogue content.

The immense hype, misinformation, and outright lies that plague the ICT industry today is regrettable, but is it unchangeable? How do we "teach" the youngsters of South Africa, most of whom struggle through extremely poor basic educational facilities, especially in the STEM disciplines, that:

- There is no such thing as a “digital world”. Yes, the technology that underlies virtually all information processing today is indeed digital, the natural wonders of the analogue world are “coded” into digital signals for processing, communications, and transmission over distances, and “decoded” back to near-replicas of their magnificent analogue forms at the receiving end for human consumption.
- There are no such things as “Cloud Computers” or “Cloud Services”. The atmosphere in the rain-bearing clouds, with very high voltage nitrogen-fixating electrical charges, and water-laden environments with very high levels of RF attenuation, is far too hostile to host computers and cloud services beyond the hype that these “technologies” generate. But cloud computing is a metaphor for the internet that continues to grow ever faster. The prestigious [MIT Technology Review of October 31, 2011](#), in an early discussion of Cloud Computing, mentioned 48 million appearances of the term in an internet search. This number has grown more than 10-fold by the time of preparation of this report.
- Clouds, Codes, Data and Digits which falsely define the modern ICT industry in South Africa and most other regions of the world, are discussed in the document “[Clouds, Codes, Data and Digits: Alternative Realities in Virtual Worlds?](#)”

To conclude the discussion on this slide, perhaps the much-hyped “digital world” will become a reality – the emergence of a new superhuman species with AI digitally enhanced biological superiority? Perhaps the concept of [techno-feudalism](#) espoused by popular economist Yanis Varoufakis is already a reality? Perhaps the dystopian predictions of popular historian Yuval Noah Harari, about a world with a few AI-assisted biotechnologically enhanced superhumans dominating a massive underclass of “useless people”, will emerge to add to the inequality threats that blight South Africa today? Two references discussing Harari’s thoughts are (a) the [BBC on 28 April 2017](#), and (b) the [Guardian on 24 May 2017](#).

SLIDE 18

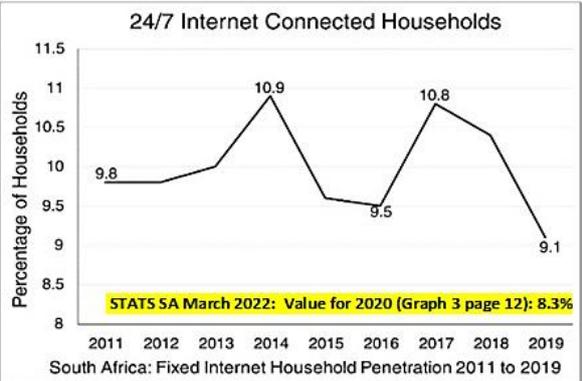


ICT Access and Use in South Africa

Household Access – The Key to SDG success

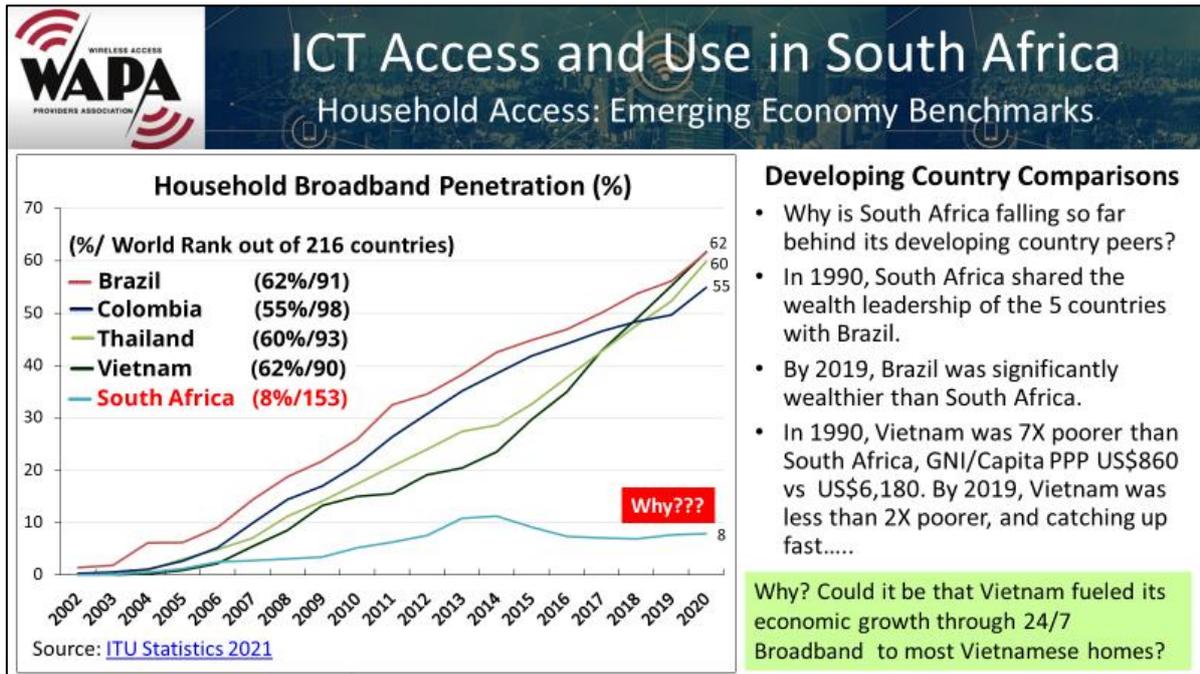
Developing		Developed		Global Leaders	
Country	Value	Country	Value	Country	Value
Argentina	63	USA	88	France	100
Vietnam	55	Australia	86	Switzerland	100
Colombia	48	Ireland	84	S. Korea	100
Thailand	45	Uruguay	82	Netherlands	96
S. Africa	9	Estonia	75	Denmark	92

Benchmark Countries: GNI per Capita (2019 US\$ 000)					
Country	Value	Country	Value	Country	Value
Argentina	11.13	USA	65.9	France	42.5
Vietnam	2.6	Australia	55.1	Switzerland	85.5
Colombia	6.51	Ireland	64	S. Korea	33.8
Thailand	7.26	Uruguay	16.2	Netherlands	53.1
S. Africa	6.04	Estonia	23.3	Denmark	64



South African official statistics by STATS SA: General Household Survey series P0318 - 2011 to 2019, e.g., <http://www.statssa.gov.za/publications/P0318/P03182019.pdf> for year 2019

1. Source: World Bank Fixed Broadband Subscriptions per 100: <https://data.worldbank.org/indicator/IT.NET.BBND.P2>
2. “Value” = estimated % of households with 24/7 broadband
3. Fixed Broadband household penetration: estimates derived from weighting “broadband subscriptions per 100” using average household size.



Slides 18 and 19 are grouped together in this discussion because of their similarities of purpose – they raise the provocative question of Why?

Why has South Africa lagged its developing country peers Brazil, Colombia, Thailand and Vietnam by such huge margins after entering the 21st century at similarly low levels of information and knowledge-delivering broadband networks?

Could this be one of the main reasons why South Africa is the global leader in income inequalities with socio-politically divisive unequal levels of poverty?

The evidence, included in numerous informative documents and statistics, including the historical timeline of ICT growth in South Africa provided in *Table 4.1.1. – A Brief History of ICT in South Africa*, on page 7 of the Competition Commission’s reference document <https://www.compcom.co.za/wp-content/uploads/2019/08/Walter-Brown.pdf>, suggests the following possible reasons:

1. Throughout the 160 years of ICT development in South Africa, which portrays South African technologists as a highly competent early adopters of the latest technological developments in ICT, the nation has maintained a highly divisive ICT growth policy, along racial lines prior to the end of apartheid in 1994, followed by severe wealth-based divisions, which largely retained the racial characteristics of the past.
2. The nation’s ICT growth strategy has tended to be technologically deterministic (build the most advanced technology and its benefits *may* trickle down to the poor), within a neo-liberal market focussed mantra (make the wealthy wealthier and their excess wealth *may* trickle down to the poor). None of these “trickle-down” growth models have worked for South Africa, perhaps they never will. They have not worked in most capitalist-leaning democracies that have tried them: the USA over numerous cycles of political changes; the United Kingdom as the country faces a possible economic collapse due to climate change, global insecurity and instability exacerbated by political leadership changes; the immense wealth of the Russian Elites, the so-called “Russian Oligarchs”, did not “trickle-down” to the poor. Could this be one of the causes of Russia’s “wag the dog”-like violent attacks on competing ideologies? (Read about “wag the dog” in [Merriam Webster’s excellent explanation here](#)).
3. An example of South Africa’s ICT history directly related to the core business of WAPA is the introduction of wireless technologies in 1898. The full story is told in “[Wireless Telegraphy During the Anglo-Boer War of 1899-1902: by Duncan C. Baker](#)”. The first wireless licences were awarded in 1902 following the revisions of the Electric Telegraph Act of 1861. One hundred and twenty years later, South Africa’s WAPA wireless operators are still struggling against insurmountable regulatory odds to improve their operating licences so that they can

provide vital information and knowledge-delivering services to the whole nation, instead of the few that can afford the services under the prevailing economic growth models.

The self-explanatory charts above provide further evidence that ICT-driven economic and human development can happen even in poor countries that wish to grow their economies - it is a choice that countries make for themselves. There is also enough evidence to show that fully developed economies today understood the value of ICTs early in their growth histories, and built the ICT infrastructures to fuel such growth. They answered the question “do countries grow their ICT sectors well because they are rich, or do they become rich because they grow their ICT industries well?”

Anecdote, Japan 1998. In an earlier life serving the ITU, the author of this document was assigned the task of serving the first [ITU Asia and Pacific Telecommunications Development Conference \(New Delhi, 1988\)](#). During the pre-conference preparations, he posed the question directly to the Japanese delegation – the answer was unambiguous and very specific: “Our country, its economy and society, was severely damaged by WWII. Our leaders understood that modern information and knowledge was the key to the recovery of both – they used every trick in the trade to advance the nation’s telecommunications infrastructure”.

Japan has one of the most advanced ICT networks in the world today, and the country’s leaders anchor their responses to their SDG challenges directly to their continuing ICT successes – read the Japanese Government’s 2021 paper “Mobilizing Science, Technology and Innovation for SDGs: Japanese Actions in STI for SDGs”, available at https://www.jst.go.jp/sdgs/en/pdf/sti_for_sdgs_report_en_apr_2021.pdf.

SLIDE 20

WAPA WIRELESS ACCESS PROVIDERS ASSOCIATION

ICT Access and Use in South Africa

Summarising South Africa's ICT Challenges

- **South Africa is a victim of its history**
 - The birthplace of *Homo sapiens* where egalitarian lifestyles with free sharing of knowledge and information was born, now struggles to learn from that history to build a better future
- This generation of adult South Africans are all victims of relatively recent human history:
 - Dreams of immense wealth from unbridled **neoliberal capitalist economic** and social hierarchical models:
 - Dreams of wealth redistribution through “**Radical Economic Transformation**” or more extreme social restructuring processes
- Resolving the conflict between the socio-political-economic extremes is very difficult at best, unlikely at worst. The best approach is to educate the children, impart the full range of economic, social, political, technological, environmental knowledge to them all so that they can develop workable solutions in future. All this knowledge and skills are grounded in the ten fundamental 4IR skillsets outlined on page 8 of [ICT4SDG4](#)
- The starting point for that education is discouraging – more than 60% of the nation’s children live in poverty, excluded from the high quality education enjoyed by 24% of their peers. In this 4IR age, just 20% of schools are connected to the information and knowledge-delivering internet. [Can WAPA Members Help?](#)

Like all the world’s nations, South Africa is a victim of its own history, struggling through various socio-cultural-economic-political ideologies and structures that ranged from conquests of the original inhabitants of the country by African migrants from the southern regions of West Africa from circa 2,000 BCE to circa 1,500 CE, a period spanning approximately 3,500 years. The amazing story of this migration, and its related socio-cultural foundations, was narrated by world-renowned Zulu Traditional Historian Vusamazulu Credo Mutwa in his

classic “[Indaba, My Children](#)”. A more formal version has been written by historian Mark Cartwright in April 2019 in “[Bantu Migration](#)”. This ancient history was followed soon after by [European colonization and conquest starting around 1,650 CE](#), a mere century after the African migratory colonization. This round of conquest and colonization introduced a dangerously provocative racism to the colonizing process, which continues to shape South African society today, even after the end of apartheid and official racism in 1994.

This history is relevant to WAPA members, it shapes the socio-cultural-economic-political environment in which they must thrive or fail. The South African economic-socio-political environment is simply a clash of ideologies – [neoliberal free market capitalism](#) at one extreme, and “[Radical Economic Transformation](#)” or similar, at the other.

WAPA ICT core services can, perhaps must be positioned to provide the learning platforms needed to address these ideological conflicts in the long term. The major national ICT operators find it difficult to focus on the needs of those South Africans that need the information most – the poorest and youngest in the land. All Significant Market Power (SMP) ICT companies in the land are too busy investing in leading edge technologies like 5G, and using them to eke out new profit streams from the wealthiest segments of society in the land, hoping that government, and smaller more flexible service providers like WAPA, can bridge the national ICT access gaps, the so-called “digital divide”.

The above environment is just one very good reason why WAPA and similar institutions (ISPA?) should reinforce their searches for sustainably profitable solutions to bridge South Africa’s massive information and knowledge divides, and in so doing, earn the respect and support of the whole nation, and a growing number of international experts as listed and discussed in the slides that follow.

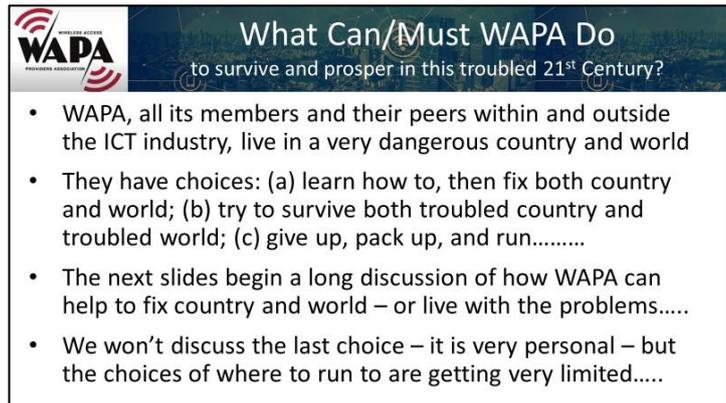
SLIDE 21

This slide is self-explanatory, it needs little, if any discussion. All that is needed by anyone concerned is to read, listen to, and see any media source in South Africa and the world at large, to understand the unfolding disasters facing the world as a whole, and South Africa in particular.

No country or society is immune, but the key tools for the amelioration of these unfolding disasters, the ICTs, are themselves being progressively abused to fuel these disasters even further.

There is safety in numbers – the more people who have access to both productive and counter-productive information and knowledge can find ways to overcome the threats as the future unfolds.

This may of course comprise a very complex process of recovery from global disasters, if the disasters themselves do not bring forward the expected next, and sixth, mass extinction. A media house well-known to WAPA members, CNET, published in May 2022 the article "[Researchers Say We're in a Sixth Mass Extinction. This Time, Humans Are the Culprit](#)" ([link here](#)). The whole world, and WAPA, should listen.



What Can/Must WAPA Do
to survive and prosper in this troubled 21st Century?

- WAPA, all its members and their peers within and outside the ICT industry, live in a very dangerous country and world
- They have choices: (a) learn how to, then fix both country and world; (b) try to survive both troubled country and troubled world; (c) give up, pack up, and run.....
- The next slides begin a long discussion of how WAPA can help to fix country and world – or live with the problems.....
- We won't discuss the last choice – it is very personal – but the choices of where to run to are getting very limited.....

SLIDE 22



The Market: The South African Economy, and therefore "The Market", is shaped by deep historically-derived ideological differences. Brief tongue-in-cheek reminders of the "definitions" of these key ideologies:

- The difference between Capitalism and Communism: "*Under Capitalism, Man Exploits Man. Under Communism, it is exactly the opposite*" Attributed to [John Kenneth Galbraith](#) (Canadian-born Economist, 1908 to 2006)
- "*Democracy is the worst form of government – except for all the others that have been tried*": [Winston Churchill](#), (British Statesman, Soldier, Writer, Prime Minister, 1874 to 1965)

Capitalism and its historical bedfellow Democracy have been the dominant economic and political ideologies for many years now, but even they are being increasingly questioned as the spectre of inequality, poverty and unemployment remain largely intractable. The competing communist philosophy has served a few countries well, and destroyed many others. Perhaps economist John Galbraith was right, they are exactly the same and exactly opposite.

Galbraith's thinking, and Winston Churchill's comment, combine to underscore the growing discomforts of both ideologies, as stated by a

growing number of economists and related intellectuals. The discomforts are captured well by Richard V. Reeves, a Senior Fellow at the Brookings Institution: "[Yes, capitalism is broken. To recover, liberals must eat humble pie: 25 Sep 2019](#)" ([Brookings 2 Oct 2019](#)):

"Capitalism reigns. But capitalism is in trouble. Therein lies the paradox of our age. For the first time in human history, a single economic system spans the globe. Of course, there are differences between capitalism Chinese-style, American-style and Swedish-style. Close up, these differences can seem significant. But viewed through a wider lens, the distinctions blur. As the economist Branco Milanovic writes in his new book, Capitalism Alone, 'the entire globe now operates according to the same economic principles – production organized for profit using legally free wage labour and mostly privately owned capital, with decentralized coordination'".

The World Economic Forum of 2020, known as the main capitalist thinktank or talk shop in the world, covered the growing disquiet over capitalism being driven by techno feudalism to threaten democracy:

1. **It's dead...**"Capitalism as we have known it is dead. This obsession we have with maximising profits for shareholders alone has led to incredible inequality and a planetary emergency." [Marc Benioff](#)
2. **And we've derailed...**"Maybe somewhere we derailed a little bit, where we thought making money is the real goal of the economy, where the real goal is to live happily here all together." [Feike Sijbesma](#)
3. **But this presents an opportunity...**Professor Klaus Schwab in his op-ed ahead of the meeting: [Why we need the 'Davos Manifesto' for a better kind of capitalism](#): "Business leaders now have an incredible opportunity. By giving stakeholder capitalism concrete meaning, they can move beyond their legal obligations and uphold their duty to society. They can bring the world closer to achieving shared goals, such as those outlined in the Paris climate

agreement and the United Nations Sustainable Development Agenda. If they really want to leave their mark on the world, there is no alternative."

4. **For things to change...** "The whole way that we do business, that we live and that we have grown accustomed to in the industrial age, will have to be changed. We will have to leave that behind us in the next 30 years and we have to come to completely new value chains." **Chancellor Angela Merkel** told the audience at her [special address](#). Video link: <https://www.youtube.com/watch?v=GlqItBxPh5E>
5. **But we can't ignore the lessons of history...**"Capitalism is the worst of all possible economic systems, apart from all the others that have been tried from time to time" [Niall Ferguson](#) in the [Democratic Capitalism: Dead End or Shared Destiny?](#) session.
6. **Or what many companies are already doing...**"Companies won't survive if you don't take care of other stakeholders. Japanese companies have been criticised for the last 20 years for not paying enough attention or for not putting shareholders first. Japanese companies used to say the customer first, employees second, shareholders third ... and we've been criticised for that." [Hiromichi Mizuno](#)
7. **Or the role of other players...**"It is government's responsibility first and foremost to create an environment, whether it is regulatory or in terms of policy, in which corporations will behave." [Dambisa Moyo](#).
8. **But businesses have more to do.** "CEOs in today's world have more to do to communicate that stakeholder capitalism is for the shareholders' long-term benefit." [Satya Nadella](#). An Insight, An Idea with Satya Nadella, yet, it is the same Satya Nadella who says "[I Won't Exist if I'm not in the Cloud](#)", as he launched Microsoft's [AZURE](#) Cloud Services, with very little attention to the fact that the Collins Dictionary definition of "Azure" is "of or having a [light](#), purplish [shade](#) of blue, like that of a clear and [unclouded](#) sky" – what? No clouds in Microsoft's Azure?
9. **WEF 2022** also focussed much discussion on the growing conflict between shareholder and stakeholder capitalism and democracy:

"The world currently knows two prevailing and competing economic systems: shareholder capitalism, which is dominant in many Western economies, and state capitalism, which is prominent in many emerging markets. Both systems have led to tremendous economic progress over the past few decades. They left us with a world that is more prosperous than ever before. But each has equally brought about major social, economic, and environmental downsides. They led to rising inequalities of income, wealth, and opportunity; increased tensions between the haves and the have-nots; and above all, a mass degradation of the environment"

Once again, the question arises – what has this matter of competing ideologies got to do with WAPA?

The best answer is very little right now, but the arguments in favour of WAPA portraying its members as well-informed responsible ICT service providers, serving people first, the principal stakeholders, albeit within sustainable profitable businesses, will improve the organization's credibility and attractiveness to the stakeholder community listed and discussed in Slides 26 to 28.

SLIDE 23



The ICT Market and Environment in South Africa

- The triple threats of inequality, poverty and unemployment are central to the ideological divisions that shape the relationships and politics of whole nations
- They also shape the market profoundly – the definition of an "ICT market" differs greatly between the "24% South African haves" and the "76% South African have-nots"
- Can South Africa's poor, mainly black and brown "76 percenters", be defined as a "VIABLE ICT MARKET" in terms of the ICT Industry? The Competition Commission? DCDDT? ICASA? Telkom? Vodacom? MTN? Or any other MNO? **WAPA?**

It wasn't always like that. For more than 200,000 years, Humans were "Fiercely Egalitarian" – No Social Hierarchies; No Age, Gender, Race, Tribe or Wealth Inequalities; Not even capability-based Inequalities. Hunter-gatherers jealously and fiercely protected their Egalitarian Lifestyles. South Africa's neighbour BOTSWANA retains remnants of that society. Officially there are no Blacks, Coloureds, Asians/Indians, or Whites in Botswana – NO BEE or B-BBEE - there are only Batswana of many complexions and hair textures — a relic of their [Khoi and San ancestry who were fiercely egalitarian for more than 200,000 years.](#)

South Africa's ICT market is clearly shaped by the nation's politics, and the competing economic models associated with the politics. The technologies used in ICT infrastructure and services development have always been the easiest part, although their application has also been fundamentally influenced by political and ideological decisions.

The economic ideologies, in which new services

targeted the wealthy high income generating populations first and almost exclusively, effectively extended the dangerously provocative racial divisions in ICT access and usage inherited from the nation's apartheid past. There is no

other explanation for the very visibly skewed growth in the nation’s ICT access and usage, as shown by the following simple comparison in Table 1 that follows, of South Africa’s ICT progress against the progress in other emerging economies across all prevailing socio-economic-political ideologies.

Table 1 suggests that ICT4D is ideologically neutral: South Africa and India rank lowest in the benchmark, both are capitalist-leaning democracies. China and Vietnam ranked very high in annual ICT growth rates - both are socialist-leaning command-control economies. Colombia has the closest demographic and economic similarities with South Africa, but, how did the country grow its internet-connected households to nearly seven times that of South Africa from the same starting point 20-years ago?

Table 1: Relevant Indicators

Emerging Economy	National Ideology	Fixed broadband per 100	**Estimated connected households (%)	5-year CAGR *	10-year CAGR
Vietnam	Socialist Republic	17.2	67	15	16
Thailand	Constitutional Monarchy	16.6	50	13	13
China	Autocratic socialist with capitalist-leaning economic mix	33.6	***71	14	11
Brazil	Constitutional Republic, left and right-leaning economics	17.1	61	9	7
Argentina	Constitutional Democratic Republic, mostly right-leaning	21.2	70	8	6
Colombia	Democratic Multi-party Republic	15.3	53	10	6
Russia	Autocratic leftist Command/Control Economic Policy	23.2	60	8	5
India	Parliamentary Democratic Secular Republic	1.6	8	6	5
S. Africa ¹²	Democratic Republic with mixed but mainly neo-liberal economic ideologies	2.2	8	4	-3%

Table 1 Notes

* Sorted in ascending order by 10-year annual growth rates.

** In the absence of verified data, an approximation based on fixed broadband penetration multiplied by the average household occupants was used. Where data has been published, e.g., South Africa, that data has been used.

*** Source: ITU 2021

A closer analysis of these issues is strongly recommended for WAPA if the organization wishes to grow sustainably into the distant future. Such an analysis will show that ICTs are vital growth tools under any ideology. In fact, the knowledge delivered by ICTs has, and will continue, to lead to fundamental mostly positive changes in all competing ideologies. Classic examples are the global debates currently under way concerning the capitalist threat to democracy itself – many of the threats are due to misapplication of technologies – the “techno-feudalism” suggested by popular economist Yanis Varoufakis.

Ideological debates in the provision of ICT4D are mainly distracting and wasteful, they should be rechannelled towards debates about the information and knowledge that people need, so that they can shape and reshape the ideologies from a strong knowledge base, discarding those that cause harm. Unproductive ideological debates with too much misleading focus on technologies and ICT industry obfuscation, debates like “*It’s the Economy, Stupid*,” it comprises digital worlds, digital divides, digital gizmos and useless chit-chat through social media, clouds of confusion and obfuscation, and now Metaverse, etc.,” are wasteful. The primary focus of the debates should change towards the services that ICTs can provide for people’s personal and collective development and growth. Such a focus shift would in fact shape the ideological distractions themselves, instead of being dominated by them.

Some references consulted for this discussion are:

- ICASA lifts lid on state of SA’s ICT sector 2020 Report, 2018 data: <https://www.itweb.co.za/content/Olx4zMknEaz756km>

¹ Read University of Pretoria article in “*Neoliberalism and Inequality in Post-Apartheid South Africa, 2020*”: <https://upjournals.up.ac.za/index.php/pslr/article/view/1833/1719>

² WEF October 2022: [The impact of capitalism on poverty maybe isn’t what you assume Oct 7, 2022](#). “A new study delves into the historical impact of capitalism on poverty. It suggests the effect was negative until workers were empowered and treated fairly. Treating employees with dignity and respect is a tenet of stakeholder capitalism”

- SA's ICT sector grows despite economic slowdown, 2022 Report, 2020 data: <https://www.itweb.co.za/content/Olx4zMkndWz756km>
- ICASA State of the ICT Sector Reports for 2020. 2021. And 2022: e.g., <https://www.nab.org.za/uploads/files/State-of-ICT-Sector-Report-March-2022.pdf>
- Broadband data from World Bank Database: <https://data.worldbank.org/indicator/IT.NET.BBND.P2>

SLIDE 24



WAPA WIRELESS ACCESS PROVIDERS ASSOCIATION

The ICT Market and Environment in South Africa

WAPA, or its members, cannot on their own fix South Africa, the world, or the ICT Market... But they can help..... Create a life-long continuous learning platform that shapes future generations, so that they can do what current generations are clearly unable to do.....

"The best investment for one year is to grow grains; the best investment for ten years is to grow trees; the best investment for a lifetime is to educate people. What you gain from one year's growth will be grains; what you gain from ten years' growth will be trees; what you gain from a hundred years' growth will be people." Guan Zhong, about 2,700 years ago.....

The Scandinavian and Benelux countries followed the Chinese model very well: **Finland, 1862 to 1868: Massive challenges - Famine, Climate Disaster, Multiple Colonisations and Wars, Extreme Inequality - GINI Coefficient 88 compared to South Africa's 63!** 100-years later, Finland became a global leader in Education and Equality - See [ICT4SDG4](#) and "[Learn from Finland 2010](#)"

WAPA members are best positioned to deliver this platform - They KNOW the ICT Tools, They are Agile, Flexible, Free from "BIG COMPANY" Corporate Cultures - WAPA Members CAN do this if they decide to.....

This slide is merely a reminder that WAPA cannot do it all on its own. Partnerships are vital, as shown in the A4AI slides that follow.

The process is of necessity very long and tedious, as suggested by Guan Zhong's impressive insights that have stood the test of nearly 3,000 years.

There is another very relevant very ancient Chinese philosophy - "A journey of a thousand miles begins with a single step".

The WAPA journey should begin now - it will take a very long time to achieve, if at all.

SLIDE 25



WAPA WIRELESS ACCESS PROVIDERS ASSOCIATION

ICT Market Failure in South Africa?

The AFFORDABILITY and COST of ICT Access

1. The Internationally Recommended Maximum Cost of ICT Access is 2% of income per month for 1GB of data
2. The Average Income in South Africa, measured by GNP per Capita (2019), is US\$ 6,040 per annum, or approximately R7,295 per month ([World Bank GNP/Capita 2021](#))
3. 2% of national GNP/Capita is R145.9 per month

BUT

1. Analyses of the [STATS SA Poverty Trends Report of 2017](#) returned an average income level of R768 per month for 55.5% (30.4 million) for South Africans living below the poverty line in 2015. A new post-Covid-19 report the [NIDS 2019/2](#) report, suggests that this poverty level may have risen to 76% or 46 million South Africans.
2. 2% of that average income is R15.36 - the recommended affordability limit for 1GB of data per month
3. At the time of preparation of this presentation, the lowest cost of 1GB of data per month was estimated at R89.00 per month ([Briefly.co.za 12 July 2022](#)) - nearly six times the internationally recommended affordability level for the poorest 76% South Africans
4. Can this be classified as "Market Failure"? Or is "The Market" restricted to the wealthy 24% South Africans?

Can ANY ICT Service Provider in South Africa today supply 1GB of data per month to 48 million South Africans at R15.36 per month? CAN the WAPA family meet this target? The following 80 Global ICT Leaders, Donor Agencies and Financiers, Governments and Multilateral Organizations, think that WAPA Can!

This slide is central to these discussions and to this document.

Technology clearly is one of the many solutions for South Africa's pro-poor ICT challenges, but the way technology is and has been applied, structured and regulated has led to failure throughout the 160-years of ICT use in South Africa. The nation has been unable to provide affordable ICT access and productive quality usage skills to the nation's poor.

There have been numerous stated aspirations and policy formulations as the nation pursued its vital ICT4ALL development strategies, but clearly, given the stagnant value of the most important empowering and transformative ICT indicator of all, household penetration and use, these national efforts have failed.

A new approach is clearly needed. Can WAPA rise to the level of being a critical productive cog in the nation’s development via the information and knowledge delivered by ICTs? More than 80 highly respected and influential institutions and organizations listed in Slides 27 and 28 believe that WAPA can. The rest is up to WAPA to recognise and seize the available opportunities.

SLIDE 26

Is South Africa's ICT Market a Failure?
Many Globally Influential Leaders think that it need not be!

WAPA WIRELESS ACCESS PROVIDERS ASSOCIATION

A4AI Alliance for Affordable Internet

- Alliance for Affordable Internet: A Global Partnership with **80+ Active Members**
- All significant global ICT companies like Google, Microsoft, Intel, Cisco, Huawei, Ericsson, etc.
- All significant Development and Funding Agencies like The World Bank Group, ALL UN Organizations including ITU; USAID, UKAID, SIDA; Women's Organizations the World Over.....
- Numerous Governments and National Institutions covering East, West, North and South.....
- A Veritable Global Who's Who of ICT and International Development Gurus.

Click icon for Access

Their Recommendations?

- An Initial Target Price of "2 for 1" – 2% of Income or Expenditure for 1GB of Broadband per month
- If Affordability still remains a challenge at this price, then nations should introduce **massively shared public broadband access platforms for the poor**

The work and reports of the Alliance for Affordable Internet (A4AI) provide vital information that can assist South Africa in its understanding of the ICT challenges faced by the nation’s poor, but the rich statistical data must be handled with caution – variations of interpretation, and the numerous criticisms the reports have generated, must not be allowed to detract from their usefulness.

The history of A4AI is summarised briefly below:

Who is A4AI?

[Wikipedia](#) describes it as follows (Page 145 of 171 in [ICT4SDG8](#)):

A4AI: “*The Alliance for Affordable Internet (A4AI) is an initiative to make the Internet more affordable to people around the world. The [World Wide Web Foundation](#) serves as the Secretariat, and major members of coalition include [Google](#), the [Omidyar Network](#), the [Department for International Development](#), [USAID](#), [Facebook](#), [Cisco](#), [Intel](#), [Microsoft](#), [UN Women](#) and many others from the public, private and civil society sectors*”. **Purpose:** “A4AI was created with the goal of obtaining global broadband internet access priced at less than 5% of average per capita income globally; the target of the [UN Broadband Commission](#). It cites the lack of investment in infrastructure, competition in the market, and inefficient taxation, amongst other policy and regulatory obstacles, as being major constraints to reducing prices”

1. **Launch:** <https://a4ai.org/wp-content/uploads/2013/10/A4AI-launch-site.pdf>:

“October 7, 2013: Abuja, Nigeria & Washington DC, USA. Today, a diverse group of private and public sector players came together to launch the Alliance for Affordable Internet (A4AI - www.a4ai.org), a coalition to lead policy and regulatory reform and spur action to drive down artificially high internet prices in developing countries. By advocating for open, competitive and innovative broadband markets, A4AI aims to help access prices fall to below 5% of monthly income worldwide, a target set by the UN Broadband Commission. Reaching this goal can help to connect the two-thirds of the world that is presently not connected to the internet (source: ITU) and make universal access a reality.”

2. First A4AI Report 2013: The first edition of A4AI’s annual Affordability Report was published on 8 December 2013 - <https://a4ai.org/news/affordability-report-2013/>. This report provides an excellent introduction to the A4AI initiative, and begins the examination of relevant data that defines ICT affordability, narrowed down to the

internet. Examination of the data against future reports shows clearly the value of starting early, with any data at hand, and refining it as the process unfolds.

3. A special case study of A4AI in Brazil followed, downloadable from https://a4ai.org/wp-content/uploads/2014/08/A4AI-Case-Study-Brazil-FINAL_US.pdf - a highly informative case study which ranked Brazil 3rd in the overall rankings in the first estimate of an “Affordability Index” covering 46 developing economies, and in which South Africa ranked 12th, one behind Jordan but above Hungary and China.

The A4AI report introduces the Brazilian LAN House concept on page 15, with very little further discussion, although A4AI recommends this model strongly in all other reports, as a means to overcome extreme unaffordability. The Brazilian LAN House model, a modified pro-poor SMME and child-friendly internet café approach, was directly instrumental in uplifting and transforming the lives of Brazil’s favela dwellers, as reported in numerous reports, for example, the 2020 study by McKinsey & Company “[Brazil 2020 Opportunity Tree: McKinsey & Company](#)”, which presents dramatic statistics like 36% per annum internet user growth by the poorest community to reach 76% internet access for lower and middle-class Brazilians by 2018.

Additional information on the rise, success, and post-success demise of Brazil’s internet café model is provided in the lengthy document [ICT4SDG8](#), and in a similarly lengthy PPT survey of the world’s internet cafés at <https://www.sakan.org.za/Docs/SA-LAN.pptx>. These reference documents are of necessity very long and data-rich – the complex “colourful” story of developing people through technology cannot, must not, be told in “Twitter-length” or other popular social media platforms, the story is far too important, and interesting, for such often misleading shortcuts.

Note: The 2021 A4AI Affordability Index database, downloadable at https://adi.a4ai.org/affordability-report/data/?_year=2021&indicator=INDEX, ranks Malaysia first, Colombia second, Brazil 15th, South Africa 27th, and China 33. These data demonstrate the need for closer examination of the choices, definitions and values of the core indicators used; however, such analyses must not diminish the value of the reports. The data in Table 1 on Slide 23, suggests a very different story, South Africa’s low 24/7 internet connected households is of deep concern, a major barrier to socioeconomic growth with political stability, whereas the equivalent statistics in the A4AI report ignores the impact of the deep economic divides in the country – up to 76% of the population is excluded from the “average national income” derived from the World Bank GNI per capita database. The World Bank data, derived from or with STATS SA, is not wrong, nor is the seemingly contradictory data compiled also by STATS SA and related government institutions. All that is needed is logical and rational thinking and pragmatism in applying the available data in South Africa.

4. Second A4AI Report 2014: <https://a4ai.org/wp-content/uploads/2015/03/a4ai-affordability-report-2014.pdf>, introduces the Affordability Index, the adopted method of calculating the Index, and resulting Country Rankings.
5. Third A4AI Report 2015/2016: Published by the ITU at <https://www.itu.int/en/Lists/consultationOct2016/Attachments/44//Combined%202015-Affordability-Report+Womens%20Rights%20Online%202015%20report.pdf>
6. Fourth A4AI Report 2017: <https://a4ai.org/wp-content/uploads/2017/02/A4AI-2017-Affordability-Report.pdf>
7. Fifth A4AI Report 2018: <https://a4ai.org/wp-content/uploads/2018/10/A4AI-2018-Affordability-Report.pdf>
8. Sixth A4AI Report 2019: https://a4ai.org/wp-content/uploads/2019/10/A4AI_2019_AR_Screen_AW.pdf
9. Seventh A4AI Report 2020: <https://a4ai.org/wp-content/uploads/2020/12/Affordability-Report-2020.pdf>
10. Eighth A4AI Report 2021: https://a4ai.org/wp-content/uploads/2021/12/A4AI_2021_AR_AW.pdf
11. Vital A4AI Data: Affordability Drivers Index 2021: https://adi.a4ai.org/affordability-report/data/?_year=2021&indicator=INDEX

CRITICISMS:

- a. **Michael Gurstein** (October 2, 1944 – October 8, 2017), a well-known ICT4D advocate and deceased friend of South Africa, leads the criticisms in several articles, including “[A4AI: Who Could Oppose a More Affordable Internet?](#)” Michael correctly identifies the promotion of policy fixes and competitive markets as a major flaw in the A4AI thinking, questioning if “competitive markets” are possible in a society as unequal as that of South Africa?”
- b. **Average Income:** The A4AI analyses use the World Bank’s GNI per capita as a basis for estimating ICT affordability, but is this appropriate in a nation with such huge income disparities as South Africa? If, as suggested in Slide 25 and related discussions, up to 76% of South Africans survive on approximately ZAR 768 per month according to the government’s own analyses through STATS SA, what value can be achieved by using the World Bank’s GNI per

Capita of ZAR 7,295, approximately ten times higher, to estimate the vital cost of broadband access and use by the poor 76%?

- c. **ICT Policy and Regulatory Fixes:** While the significant and valuable A4IA partnership was launching its initiative in Nigeria’s capital on October 7 2013, the South African Government launched its own corrective initiative just three months later on 6 December 2013 – the [SA Connect National Broadband Policy](#). This was followed again three years later, by the [National Integrated ICT Policy](#), yet another National ICT Policy promulgated on 28 September 2016. This national policy contained numerous provisions for ensuring ICT4ALL in South Africa, including the vital restructuring of the state-owned Universal Service and Access Agency of South Africa (USAASA) to enable improved ICT4D funding through a new Digital Development Fund (DDF). Implementation of the vital [DDF has been postponed to March 2023](#) – ten years after the national Broadband policy, and seven years after the critical DDF policy provision.

OPERTUNITIES: What opportunities can South Africa’s ICT policy and regulatory failures, and the useful elements of the A4AI studies and reports, open up for WAPA’s long term growth strategies?

In slide 22, Winston Churchill’s quotation on democracy provides some useful insights into the role of ideology in development. To conclude this introduction of A4AI, another quotation attributed to Winston Churchill may be appropriate: *“An optimist finds an opportunity in every difficulty; a pessimist finds a difficulty in every opportunity”*.

South Africa’s socio-economic-political challenges are extremely difficult – are WAPA members optimists or pessimists?

SLIDE 27 and Slide 28



These two slides need very little discussion. They show that South Africa is not alone in expressing deep concern about the complex fight against the triple threats first, and all interrelated and integrated SDG challenges that they unleash. And of course, the outcomes of doing nothing.

All published A4AI annual reports, from 2013 to 2020 noted that public access to broadband remains the most effective, and perhaps the only short-term response to the ICT affordability divides that afflict most developing countries, including South Africa. [A4AI 2017](#) and [A4AI 2019](#) provide detailed case studies with invaluable advice and recommendations for nations like South Africa with very deep affordability divides, coexisting within environments where the “technological digital divide” has virtually been breached. South Africa has achieved nearly 100% analogue to digital conversions in the national ICT network, and nearly 100% geographic and population coverage by digital mobile ICTs and their user devices.



As discussed in [ICT4SDG8](#), South Africa has a very deep history of public access to all forms of ICTs, from the humble PSTN voice services all the way through to internet-

based ICT services – none have been successful to date. The strongly recommended internet café model has been tried, by government, by the national ICT industry, and by organizations like ISPA and WAPA, none have been successful.

Why?

South Africa needs to rethink the approach to affordable, effective, and sustainable public access ICT platforms which cater for the nation’s poorest majority, especially the children of the poor. A new kind of internet café is needed, and if the focus is on the poor, this kind of internet café will not be attractive to the nation’s SMP ICT operators, their

corporate cultures are too deeply entrenched in the liberal free market economic model. A smart MTN, Vodacom or Telkom internet café surrounded by a stream of open sewers in an informal settlement exposed to massively destructive “shack fires” and crime, will not be tolerated, and yet, it may just be the facility needed by the children and parents/caregivers who need to protect themselves from that environment, through access to the vital information and knowledge they need. The Annexes starting on page 169 of the document [ICT4SDG8](#) attempt to tell this story.

Can WAPA help to fill the national void? Can WAPA begin to think of partnerships with all the 80 and more organizations listed in these slides, especially those dedicated to SDG challenges like women and child abuse? Can WAPA think about its services mix along the lines of local partnerships with all government and NGO entities, irrespective of the potentially vast differences in ideological preferences?

The possibilities and opportunities for WAPA are endless, but they cannot be stated in simple terms in a document such as this – they need deep, perhaps even constructively confrontational discussion – but, without such partnerships, the process will be nearly impossible to achieve.

Confucius’ journey of a thousand miles must start with the first WAPA step – creative thinking outside the confinement of any type of boxes. A win-win for both country and WAPA is possible, but very hard to realize and implement.

SLIDES 29 to 35 and CONCLUSION

These slides are presented for WAPA’s internal consideration – how to begin the discussion which must end with an action plan, irrespective of its complexity or duration. The strengths of WAPA, representing mainly SME entities even with the socioeconomic divides that split this vital economic cluster, are significant, and must be leveraged.

It is worth noting that the current DCDT Minister, Ms Khumbudzo Ntshavheni was recently transferred from Minister for Small Business Development (DSBD) - both her former and current assignments are critical to what WAPA can be in South Africa’s development.

Similarly, the current DSBD Minister, Ms Stella Tembisile Ndabeni-Abrahams, was recently transferred from Minister of DCDT.

These two portfolios are powerful potential allies for WAPA, how can WAPA secure their support from both portfolios, irrespective of acknowledged differences in political ideologies, and begin to influence their ICT thinking for a win-win partnership, together with the 80 plus influential organizations listed in slides 27 and 28?

This is a challenge for WAPA to figure out, without which the status quo is likely to remain, if it does not destroy South Africa first.
