Agile governance for the 'new normal': Is Africa ready?

https://doi.org/10.36369/2616-9045/2022/v11i2a7
Online ISSN: 2616-9045.Print ISSN: 2218-5615

STELLAH N. LUBINGA

University of Pretoria stellah.lubinga@up.ac.za

NORMAN TAFIRENYIKA NHEDE

University of Pretoria norman.nhede@up.ac.za

MARY MANGAI

University of Pretoria
Mary.mangai@up.ac.za

TAFADZWA CLEMENTINE MARUMA

University of the Free State MaramuraTC@ufs.ac.za

Abstract

In response to the COVID-19 pandemic, many governments opted to use agile methodologies to tackle various challenges. Policymakers did not follow the normal protocol of policymaking and governance; instead, they adopted a more agile policymaking process that deploys agile approaches such as policy labs, policy prototyping, policy stimulus and digital-ready policies. In addition, health scientists were primarily responsible for most of the policies adopted during the pandemic. This was a major change in the policy arena. All these changes gave birth to what is currently known as "agile governance". Although not new, this form of governance has taken the world by storm, especially during the pandemic. While other regions across the world have routed for agile governance, it is not clear where Africa stands in this debate. This paper, therefore, assesses Africa's readiness for the so-called "agile governance" as the new normal. Drawing from a qualitative desktop research based on an extensive literature review and a content analysis. The study findings reveal that the future and adoption of agile governance in Africa appear bleak. Unless some changes are implemented, Africa may continue to trail behind Europe and other world regions. This is because there are still many deterrents, such as a lack of efficient leadership, the bureaucracy dilemma, the skills gap, and the legislative challenge that the continent must deal with before even thinking of becoming agile. To remedy these challenges, we conclude that African governments adapt to change

by employing flexible action plans like adopting a flexible blueprint to guide agile governance strategies; innovation; streamlining bureaucracies; reskilling current public servants, and creating agile mindsets.

Keywords: Agility, Agile governance; Agile policymaking; Agile manifesto

Introduction

In response to COVID-19, many governments opted to use agile methodologies to tackle various challenges. Thus, governments disproved the old orthodoxy that procurement must be rigid and time-intensive, and they changed the policy process as we know it and adopted a more agile policymaking process that deploys agile approaches such as policy labs, policy prototyping, policy stimulus and digital-ready policies (Eggers et al., 2021). These changes gave birth to what is known as 'agile governance'. Agile, in this sense, is defined as an organisation's ability to respond quickly to unexpected changes in meeting the demands and needs of an increasingly changing society (Mutiarin et al., 2022:4-5; World Economic Forum, 2018:4). Although not new, this form of governance has taken the world by storm — especially during the pandemic. This is seen mainly in European and Asian governments through their adoption of various agile initiatives:

According to the World Economic Forum (WEF, 2018:9), regulatory sandboxes refer to safe spaces that companies employ to test innovative products, services and business models without overcoming the usual regulatory and financial hurdles (such as licensing) of engaging in the activities in question. Examples are Australia's Enhanced Regulatory Sandbox, Bahrain's Central Bank of Bahrain (CBB's) Fintech and Innovation Unit, the Monetary Authority of Singapore's fintech regulatory sandbox and the United Kingdom's Financial Conduct Authority (FCA) regulatory sandbox (Glossop, 2021).

Policy labs, referred to as new policy techniques by government bodies, are used to design public services by focusing on end-users and using data analytics and new digital tools to augment policy development (WEF, 2018:8). These are seen mainly in the European Union member states ranging from city to national-level policy labs in countries like Denmark, France, the Netherlands and the UK (The European Commission Joint Research Centre, 2016: 8). Crowdsourced policymaking leverages the dispersed knowledge of individuals and groups to take advantage of bottom-up crowd-derived inputs and processes with efficient top-down organisational engagement through information technology (IT) to solve problems, complete tasks or generate ideas (Taeihagh, 2017:629). Crowdsourcing is categorised into three generic forms, namely:

• Virtual labour markets – an IT-mediated market enabling individuals to engage in spot labour by conducting microtasks offered by organisations;

- Open collaboration platforms in agenda setting, where crowds voluntarily engage with the problems/opportunities posted, for example, starting a wiki, social media and mass contributions, and
- Tournament crowdsourcing or idea competition, where organisations post their problems to specialised IT-mediated platforms to attract specialised crowds interested in an area (Taeihagh, 2017:630-633).

An example of crowdsourcing policymaking is CrowdLaw in Spain, which uses technology to tap into the intelligence and expertise of the public to improve the quality of law making (TheGOVLab, 2022; WEF, 2018:10). Despite adopting the above-mentioned new agile tools across the globe, and based on research, only a few are visible on the African continent. Africa has been left behind, as only a handful of African countries have realised the existence of agile governance and have jumped on the 'agile' bandwagon. Therefore, it can be asked, "What is Africa's readiness regarding agile governance as the new normal?". To try and address this question, a qualitative approach was followed, and data were collected using unobtrusive research techniques – including documentary and conceptual analysis of authoritative sources to conceptualise and contextualise agile governance. We believe the study makes two significant contributions to understanding the factors hindering the consistent adoption of elegant control in Africa. First, the study suggests agile governance is beyond the use of computers and quick decisions but extends to the combination of adopting various agile initiatives and a change in mindset for agile governance to enhance student experiences. Secondly, the lack of proprietary and exclusive rights to many available technological innovations and tools suggests that their design/use is unregulated by many African countries. Moreover, the bureaucratic nature of African governments remains the main weakness in agile governance adoption.

The paper starts with the introduction, the research methodology, and then a literature review that discusses the adoption of critical drivers for agile governance. The discussion moves on to the state of agile governance on the African continent compared to the rest of the world and the factors that hinder the adoption of agile governance on the African continent. It ends with conclusions and recommendations. The lessons from the study can be borrowed and implemented in various African countries to speed up the adoption of agile governance. In addition, the recommendations offered in this study for addressing the factors hindering agile governance adoption can be used to inform agile adoption strategies.

Research Methodology

This study employed a qualitative approach in the interpretivist tradition. It drew its arguments from secondary data, which included documentary and conceptual analysis of authoritative sources to conceptualise and contextualise agile governance. The rationale behind this approach is that the approach allowed the study to focus on meaning and

employ multiple methods to reflect different aspects of the issue, in this case, agile governance. Data from secondary sources were collected from published journal articles. All sources were selected based on the general principles of handling sources: authenticity, credibility, representativeness, and meaning (Mogalakwe, 2006:224). The researchers ensured that all sources included were genuine and coherent and represented the totality of all the relevant documents written by leading authors on agile governance. To select the most appropriate authorities on agile governance, the researchers searched on Google Scholar using the terms' agile' and 'governance', resulting in 124,000 hits. The search was further refined, focusing on the works of specialised reviews and platforms like the WEF, the World Bank database and the International Development Research Centre (IDRC). Once the sources had been chosen, a hermeneutical reading process was conducted to make sense of the content and answer the main research question (George, 2020; Wessels, 2021:62). The section below reviews the literature on agile governance.

Literature Review

To understand agile governance, one must first look at the concepts of agile and governance (Naz & Groves, 2022:1). First coined in the IT discipline; agile refers to the need for organisations – especially bureaucracies – to become more flexible, adaptive and rapid in their behaviour. It also refers to the ability to respond quickly and effectively to changes in the external environment (Vejseli et al., 2020:5635). In addition, according to McBride et al. (2021:2), agility is derived from the notion that flexibility is something one can build on; however, it also depends on the fact that change occurs continuously – often in a way that is interrelated to user values. Furthermore, organisations following this fundamental management philosophy must align collectively with these values. Moreover, according to the WEF (2018), agility implies an action or method of nimbleness, fluidity, flexibility, or adaptiveness.

Governance refers to developing a broader view to ensure that the public good is accomplished in arenas involving internal and external actors (DeSeve, 2020:15). It also "signifies the norms, values and rules of the game through which public affairs are managed in a transparent, participatory, inclusive and responsive manner" (UNESCO, 2022). Thus, when the two terms are combined, agile governance refers to a government's ability to respond quickly to unexpected changes in meeting the demands and needs of an increasingly changing society. Alternatively, the organisation can perform cost-effectively and increase its speed and accuracy in exploiting opportunities to make actions innovative and competitive through online services in line with technological developments (Mutiarin et al., 2021:207-208). In summary, agile governance is a system of authority that can positively and quickly adapt to a sudden change (Naz & Groves, 2020: 36).

According to Agile Alliance (2001), agile governance is not new and derives from the Agile Manifesto initially proposed in 2001. It has been adopted by more than 100 European and Asian governments, with the IT discipline having used an agile approach to organisations for two decades (Mutiarin et al., 2021:210-211). Thus, as alluded to by DeSeve (2020:14), agile governance has arrived in the public sector, and it is high time governments start putting enablers such as senior leadership support, funding and training in place. However, what are the drivers of agile governance? According to this research, we believe that a few factors can be singled out as the critical drivers of agile governance adoption:

First is the need for collective intelligence instead of relying on one person in an organisation to do all the work. Many organisations have learnt that depending on a single 'rock star' employee to build and maintain their systems results in disaster when that employee resigns. As a result, organisations have resorted to agile teams splitting up the work dynamically rather than adhering to organisational chart lines (Druchman, 2010).

Second is the Fourth Industrial Revolution (4IR) wave, which is an umbrella term for three-dimensional printing, artificial intelligence (AI), big data, the industrial internet of things, robotics, autonomous vehicles, biotechnology, cyber-physical systems, fifth-generation wireless, and quantum computing (Sutherland, 2019:233). According to the literature, 4IR has been responsible for increased data volumes, advanced algorithms, AI, automation and robotics. This digitalisation of what has been coined the 'Second Machine Age' is currently progressing at an alarming rate. Despite the numerous opportunities it has presented, it requires governments to think of new ways of keeping up with high-level machine intelligent systems, fast-changing consumer demands and disruptive business environments (WEF, 2019:5). As stipulated by the WEF (2018:4), 4IR is characterised by the unprecedented technological advances transforming how individuals and groups across society live, work, and interact. New principles, protocols, rules, and policies are needed to accelerate these technologies' positive and inclusive implications while minimising or eliminating their negative consequences.

The third is continuous changes in the environment. To survive the unprecedented threats – and even thrive in this more volatile, uncertain, complex and ambiguous world – many governments have embraced agility at scale. For example, the COVID-19 pandemic vastly intensified the need for governments to manage change and make decisions faster to adapt to the changing requirements (Whicher, 2021:256). This is supported by Deloitte (2021:3), which states that the pandemic changed digitalisation from a 'nice-to-have' to a 'must-have' for governments. According to Eggers et al. (2021), for governments to meet the surge in service demand while operating virtually, they needed to accelerate their digital journey in three ways: scaling the digital infrastructure, creating a more digitally savvy workforce, and investing in citizen connectivity. In addition, the loss of life increased unemployment rates, and the push of at least 88 million people to extreme poverty exacerbated the need for quick decision-making, rapid development, and the broad

implementation of technology (ILO, 2021). For example, according to Naz & Groves (2020:36-38), the government of Samoa's agility in taking up remote working while still delivering fast-paced and effective policymaking. The Legislative Assembly of Samoa responded to the COVID-19 pandemic by swiftly adjusting how it conducted its business and moving part of its work online, with support from the United Nations Development Programme (Naz & Groves, 2020:37). Faced with an overwhelmed healthcare system and a shortage of beds, France redeployed two of its high-speed trains to transport COVID-19 patients from areas hardest hit by the virus to those in which hospitals had more capacity (DeSeve, 2020:32). Similarly, India refurbished railway coaches to serve as isolation wards with beds and medical supplies while the country was in lockdown (DeSeve, 2020:32).

Fourth is the 'smart city movement'. Like 4IR, there is a global shift towards digital-era urbanisation, calling for governments to accelerate their smart city efforts. A smart city is a city that makes use of information and communication technologies to enhance inhabitants' quality of life, the efficiency of operations and services in the town and its competitiveness while ensuring that it meets the economic, social, and environmental needs of current and future generations (Salem, 2016:8). This movement calls on governments to be assessed on the quality of services delivered. In addition, citizens today are more aware of their rights because of increased access to information on public assistance. Thus, they have higher expectations of service delivery and do not accept that public sector organisations cannot improve their service delivery. Finally, the media's increased role in disclosing government transgressions and promoting social activism has put citizens in a stronger position to demand accountability and transparency (PwC, 2007:5-10).

State of Agile Governance in Africa versus the Rest of the World

As alluded to earlier in this paper, although the use of agile approaches has existed for over a decade, the state of agile governance differs across the globe, with Europe and Asia taking the lead and Africa lagging. Thus, to understand the condition of agile governance in Africa and the rest of the world, this section uses four key agile components/indicators as measurables for agile governance, and these are government Al readiness; the existence of agile tools, namely policy labs and sandboxes; crowdsourcing, and information and communications technology.

Government AI Readiness

Al is a key factor for agile governance to thrive, as agile teams have automated tests to expedite their progress (Stefanini Group, 2021). In addition, Al promotes better data access and automation and simplifies operations by providing a unified view; it can also, through machine learning models, predict when an error will occur (Ramesh, 2018). Thus,

to gauge agile governance readiness, one must look at the use of AI in government. This is done using data from the 2021 and 2022 government AI readiness indexes, which rank global governments' willingness to use AI based on 42 indicators across three pillars; the government, the technology sector, and data and infrastructure (Government AI Readiness index 2022). In the 2022 index, the United States of America tops the rankings, followed by Singapore and the UK. Nearly 40% of the 160 countries ranked have published or are drafting national AI strategies (Government AI Readiness Index 2022: 8). The United Arab Emirates (UAE) has made noticeable efforts to integrate AI in various public sector departments, including automated call-centre agents using chatbots, medical x-ray diagnoses using machine learning, and even a complex autonomous taxi trial (Government AI Readiness Index 2022: 29). For example, 'Rashid' is a call-centre virtual agent that offers official answers to customers' questions about procedures, documents and requirements needed to conduct various transactions in Dubai (AlDhaheri, 2020;3). Furthermore, the UAE Cabinet formed a national-level council for AI, the Emirates Council for Artificial Intelligence and Digital Transactions, tasked with proposing policies that create an Alfriendly ecosystem, among other initiatives (AlDhaheri, 2020:3).

In contrast, sub-Saharan Africa has and continues to be the lowest-scoring region at 31.61 out of 100 in 2021 and 29.38 in 2022 (Government AI Readiness Index, 2021:44, Government AI Readiness Index 2022:34). To put this into perspective, in the African region, according to the 2021 and 2022 index, only Mauritius has an AI strategy; South Africa has yet to launch a national AI strategy, whilst Kenya is developing one (Government AI Readiness Index 2021, 2021:45). This showing the apparent disparity between various countries and an evident divide between regions.

Agile Governance Tools

There are several tools for agile governance. However, for this paper, only a few are discussed in detail in the following sections. Agile governance tools are used to improve public services and policy decisions.

Regulatory sandboxes

Regulatory sandboxes allow firms to test innovations under the regulator's supervision to facilitate safe and responsible creation (Glossop, 2020). Regulatory sandboxes are typical examples of agile tools. They have been used in agile governments, as they reduce barriers to entry into the market, inform regulators, keep them up to date on innovative solutions, and promote innovation in the fintech world (Ngari, 2022; United Nations Secretary-General's Special Advocate, 2022). The first sandbox-like framework was set up in 2012 by the American Consumer Financial Protection Bureau (CFPB) and was called Project Catalyst (CFPB, 2016). In 2015, the UK FCA coined the term 'regulatory sandbox' (FCA, 2015). As of 2018, according to the World Bank (2022), "There has been an increased density of global fintech-related sandboxes, particularly from mid-2018 through 2020. More than half of all

relevant sandboxes, or about 56%, were created between 2018 and 2019. About a fifth were created in the first half of 2020 alone, suggesting rapid growth around the world in the use of sandboxes to test fintech innovations and regulation." However, despite this agile governance tool having existed since 2012, only a handful of African countries have an operational regulatory sandbox; by far, the majority are found in Europe and Asia (Jenik & Lauer, 2017:10). See Figure 1 below.

Figure 1: Map of regulatory sandboxes across the world



1. Map of regulatory sandboxes



Source: World Bank (2022)

Policy labs/policy innovation labs as a tool for agile governance

As described earlier, policy labs are multi-disciplinary government teams experimenting with innovative methods, particularly design, to actively involve citizens at multiple public service and policy development stages (Bureau of European Design Association, 2017; Whicher, 2021:252). Also referred to as public innovation labs, public-sector innovation labs, government innovation labs, or organisational innovation labs, there are over 100 policy labs worldwide, and of these, 60 are in Europe, 14 of which are at national and regional levels in the UK (Wellstead et al., 2021:194; Whicher, 2022:253). The main goal of policy labs is to create a collaborative space allowing participants with wide-ranging skills to reach a shared understanding of a policy challenge, explore design and test user-centred solutions for potential implementation across the system (Wellstead et al., 2021:194).

According to Whicher (2021:260), policy labs operate at multiple governance levels, from the local to the national, regional, and supranational levels. For example, the Bexley Innovation Lab in the UK, the Northern Ireland Innovation Lab, the Welsh Government Innovation Lab, and the EU Policy Lab all operate at the supranational level. Regarding the regulatory sandboxes, despite the speed at which the policy labs are established, they have only recently begun to receive attention in Africa, with only one known government innovation lab identified, namely the Centre for Public Service-Innovation based in South Africa (Apolitical, 2022).

Crowdsourcing Policymaking

Crowdsourcing policymaking is applied when the dispersed knowledge of individuals and groups is leveraged to take advantage of bottom-up crowd-derived inputs and processes with efficient top-down engagement from organisations through IT to solve problems, complete tasks or generate ideas (Taeihagh, 2017:629). The WEF identified crowdsourcing as another agile governance tool that seeks to engage citizens in policy-making and search the crowd's knowledge to improve policies through online participation (Lastovka, 2015:94; WEF, 2018). Crowdsourced policy-making is not new and exists across the globe, offering unprecedented democratic participation where citizens can brainstorm, reflect, and participate in decision-making processes formerly left to only elite experts (Aitamurto, 2012:5). Examples of crowdsourcing policymaking include CrowdLaw in Spain (WEF, 2018:10).

Unlike other agile governance tools, crowdsourcing in policymaking has largely been embraced in Africa. For example, in 2002, Kenya's Ushahidi put Africa's crowdsourcing on the map with its platform for monitoring the 2002 Kenyan elections (Chuene & Mtsweni, 2015:3). Since then, similar crowdsourcing platforms have sprung up in other African countries; an example is Toloka, a crowdsourcing platform operating in countries like Ghana, Nigeria and Kenya (Connecting Africa, 2021).

Factors Hindering the Adoptation of Agile Governance

This section unpacks the factors hindering the adoption of agile governance in Africa. Below we start with bureaucratic structures. Other factors include human capital challenges, leadership dilemma, Ambiguity in the concept of agility, legislative challenges, lack of funding, ICT challenges, and an Afrocentric view.

Bureaucratic Structures

Agile governance usually requires a flexible structure to thrive in permanent crossfunctional teams; however, this is only the case in some African countries. The bureaucratic nature of African governments remains the main weakness in adopting agile governance. This is because traditional governance structures are bureaucratic, focusing on command, control, and hierarchy, and little involvement of the people in solving problems (Novak, 2017). This bureaucratic nature makes governments predictable and slow to respond, and, in most cases, they have management staff with traditional leadership traits that are outdated for the current needs. It can be argued that bureaucratic structures favour rule-based compliance outcomes.

Human Capital Challenges

Like any other form of governance, agile governance requires capacity and skills to thrive, but often, governments may need to possess these skills. This is the case in many African governments (Mergel et al., 2018:295). As alluded to in the previous sections, AI is one of the critical elements for agile governance to thrive. The same AI requires a talent pool with advanced mathematics, analytics and data science skills. According to AIDhaheri (2020:4), local skills and talent development in AI are critical global challenges, especially for young people. This skills gap in Africa means that those who would have otherwise been at the forefront of building AI are left out, preventing the continent from harnessing the full potential of transformative technologies and industries (Ndung'u & Signe, 2020:70). As indicated by the WEF, in most countries in the African region, AI specialists are scarce, with none in Ethiopia (except a few from the diaspora). According to Rwanda's Minister of State for Information Communications Technology, Rwanda has at most 10 AI engineers (Government AI Readiness Index, 2021:46).

Furthermore, according to the Global Talent Competitiveness Index 2021, talent competitiveness denotes the set of policies and practices that enable a country to develop, attract, and empower the human capital that contributes to productivity and prosperity (INSEAD, 2021:9). Unfortunately, most African countries are ranked among the bottom 30 countries. This is particularly negative for Ethiopia, Mali and Mozambique, where scores have worsened by more than 10% because of weaker performances in five of the six pillars (INSEAD, 2021:19). All the above skills gaps pose a severe challenge to agile governance in Africa.

Leadership Dilemma

According to Deloitte (2018:13), influential leaders in this new model should be able to think beyond individual functions, operate without command-and-control behaviour, create diversity and stimulate collaboration while coaching employees and enabling teams to succeed. However, looking at this definition alone, Africa lacks the influential leaders needed to spearhead the agile movement. Like the old-fashioned bureaucratic governments governed by these leaders, the leaders can be labelled 'old-fashioned bureaucrats. For example, one of Africa's ten most senior leaders is four times older than the regular African (Anoba, 2019; Celina, 2021). More so, these African leaders have spent at least 20 consecutive years in power, compared to the 10-year limit of most developed countries. While the issue is not their age, longevity in leadership has shown a negative

correlation to innovation, as the leaders are accustomed to certain management styles of state affairs and irregular theoretical approaches to issues that are unsuitable for agility. The five African countries whose leaders have stayed in power the longest are Equatorial Guinea, Cameroon, Congo, Uganda and Eswatini. According to the Global Innovation Index 2021, all five of these countries were among the lowest-ranking countries or were not ranked in terms of their innovation performance and making informed innovation policy decisions throughout the COVID-19 pandemic (World Intellectual Property Organization, 2021:4).

In addition to the above, the morale of the public servants is at its lowest in many African governments because of various factors, including a poor reward system, failure to promote workers when due, poor remuneration, premature retirement of competent and skilled personnel, and nepotism and favoritism in the service (Fatile & Igbokwe-Ibeto, 2012:16). These factors dampen the enthusiasm and zeal of public servants in discharging their responsibilities. Therefore, only a few public servants are dedicated to their job.

Ambiguity in the Concept of Agility

According to McBride et al. (2021:1), while agility can represent a functional paradigm in some contexts, it is often applied inappropriately in governmental contexts because of a lack of understanding of what agile is. Much of the discourse on agility is driven by success stories in the private sector, overlooking that many of the failures in the private sector would be highly costly if visited upon a government (McBride et al., 2021:9). In addition, regarding governmental success stories, the agile governments referred to are in developed countries that have the well-managed infrastructure, employing highly skilled labour and bearing little resemblance to the problems or processes of African governments.

Furthermore, the broad scientific community in the Information Technology Governance (ITG) literature still needs to analyse the concept of agility. Therefore, empirical evidence on the role of agility in the practical ITG framework must be included. In particular, a definition of agility and its specific contribution to better business/IT alignment needs to be more specific (Nuottila et al., 2016:6; Vejseli et al., 2020:5633).

Legislative Challenge

The progress of agile governance is faced with the challenge of legislation, especially regarding how activities can be regulated and how legislation plays a part in agile progress. Unfortunately, despite some countries being well advanced in agile governance, only a few cities and countries have or are developing ethical guidelines for the development of agile governance (AlDhaheri, 2020:5). Moreover, most African countries lack a comprehensive legal framework and institutional capacity to address agility and advanced technologies, including Al application.

Furthermore, the burden of regulations and the prevalence of red tape in most African governments is a challenge undermining the social contract between the state and its citizens. This constrains innovation and weakens the productivity of small firms that make up the bulk of the region. Africa stands out for its suffocating regulations, reflected in the number and complexity of its bureaucratic procedures (World Bank, 2020:5). For example, a World Bank report comparing 190 economies by analysing regulations encouraging efficiency and supporting the freedom to do business found that 12 of the bottom 20 economies are from sub-Saharan Africa (World Bank, 2020:5). The same 12 economies scoring an average of 51.8, well below the Organization for Economic Co-operation and Development's high-income economy average of 78.4 and the global average of 63.0, which reveals a low implementation of agile methods (World Bank, 2020:5).

A daily duty tax of 200 Ugandan shillings (\$0.05) on social media sites caused Uganda to lose nearly 30% of its internet users between March and September 2018. In addition, the Tanzanian government introduced a law requiring all online content creators to pay a registration and licensing fee of roughly two million Tanzanian shillings (\$860), which drove individual and content creators offline. Similarly, Kenya's Digital Services Tax, introduced in the Finance Act 2020, has proven burdensome for content creators, influencers and small tech businesses rather than effectively capturing prominent players (Boakye, 2021).

Lack of Funding

Unlike in European countries, finance still poses a significant challenge for Africa to adopt any initiative, let alone agile governance. For example, the UK spends around £ 14 billion annually on public-sector IT operations (Soe & Drechsler, 2017:323). Innovative initiatives in Africa are usually driven by individual government departments that frequently depend on aid from donors. When this financing ceases, there is often insufficient funding to continue the project, and most of the innovation projects are abandoned (Dada, 2006:6). This is a big challenge for Africa to consider or adopt agile governance despite its benefits to service quality.

ICT Challenges

In addition to the above difficulties, poor IT infrastructure constitutes a further obstacle to implementing agile governance in Africa. For instance, some countries like South Africa and Rwanda have implemented digital government services, such as an e-procurement system allowing open and transparent bidding on government tenders and an e-filing initiative facilitating the electronic submission of tax returns and payments. Rwanda and Kenya introduced mobile payment of taxes through their M-Service platforms in 2013 and 2014, respectively (AUC/OECD, 2019). Other African countries still grapple with access to ICT, even if the infrastructure is available. For example, only 23% of the population in sub-Saharan Africa has mobile internet access with low broadband penetration (OECD,



2020:25). Furthermore, the average cost for 1 GB of data in Africa is 7.12% of the monthly average wage, subjecting citizens to the least affordable internet prices in the world (OECD 2020:37). In addition, many African economies are hampered by unreliable electricity supply and high energy costs. The cost of a permanent electrical connection is three times higher than the global average and 52 times higher than in OECD economies (OECD 2020:36). The digital divide is eminent. Moreover, in various countries, there is also a large gap between the educated elite who can afford technology and the uneducated poor who cannot (Dada, 2006:7).

Afrocentric View

Agile governance goes against the Afrocentric theory — a theory stating that every phenomenon and community in Africa can never broadly be interpreted and comprehensively understood by scholars residing outside Africa (Early, 2020). This makes it challenging to adopt agile governance, especially for those who believe agility or agile control is incompatible with African values. To date, there is little about agile control that can be said to be African, though early engagement of businesses and governments with the concept may see this develop. There is a great diversity of industry across the African continent, with different commercial and institutional capacities likely to generate various responses to the technologies encompassed in agility, as they exclusively originated in other continents.

Conclusion and Recommendations

The study's main goal was to assess Africa's readiness for agile governance, which is the new normal. Based on the findings, the future and adoption of agile governance in Africa appear bleak, and unless some changes are implemented, Africa may continue to trail behind Europe. This is because there are still many deterrents, such as a lack of efficient leadership, the bureaucratic dilemma, the skills gap and the legislative challenge, that the continent must deal with before even thinking of becoming agile. Thus, based on this research, Africa should try and bridge the gap and come to terms with the fact that agility is more than a nice-to-have; instead, it is a must-have. Therefore, the following recommendations are proposed to forge a way forward for agile governance in Africa:

- Africa must adopt a blueprint to guide its agile governance strategy by involving key Pan-African institutions, academia, and the private and public sectors in its conception of the blueprint;
- In addition, key government stakeholders should invest in creating a digital identity platform for all Africans with reliable data banks on agile governance. It is imperative to leverage readily available local talent to promote and democratise AI technology continent-wide;

- Africa must reduce the influx of new regulations that constrain innovation, harmonise regulatory policies that encourage agile governance and support ethically built agile systems to guarantee a more inclusive economic development;
- As said, structure follows strategy, so bureaucratic structuring must be done away with to support the agile methods. Africa must learn from governments in other continents and should seek 'de-bureaucratise'. This would involve streamlining bureaucracies, reducing red tape and mainstreaming innovation (Santiso, 2022:7). This must be done to increase clarity regarding agile goals and management structures and highlight clear roles identified as essential for successful agile governance implementation (Nuottila et al., 2016:81);
- As noted in this paper, there is a conspicuous skills gap between Africa and Europe, and African AI specialists are scarce. Reskilling current public servants is critical, as is investing heavily in curriculum innovation to prepare graduates for agility; and
- Emanating from the notion that the most powerful lever for transformation is the behaviour of the transformed person (Kurnia et al., 2022:728), African governments must also endeavour to create agile mindsets. As Kurnia et al. (2022:730) expressed, the main problem is that attitudes and behaviours must transition to dynamics. The mindset of individuals must be receptive to agile principles, such as iterative or incremental development. This does not mean that all agile methods are correct or effective. It simply asks for a willingness to be receptive to them. The agile mindset promotes incremental and iterative development.

References

- Agile Alliance. (2001). *Manifesto for Agile Software Development*. Retrieved April 2022 from http://agilemanifesto.org/.
- AlDhaheri, S. (2020, February 28). Building an Al nation: Accelerating artificial intelligence adoption through agile policymaking the case of the UAE. Dubai Policy Review. Retrieved January 13, 2023, from https://dubaipolicyreview.ae/building-an-aination-accelerating-artificial-intelligence-adoption-through-agile-policymaking-the-case-of-the-uae/
- Aitamurto, T. (2012). Crowdsourcing for democracy: A new era in policy-making. Publications of the Committee for the Future, Parliament of Finland, 1.
- Anoba, I. B. (2019, February 27). *Is the age of African leaders the continent's heaviest burden? Ibrahim B. Anoba*. African Liberty. Retrieved June 13, 2021, from https://www.africanliberty.org/2018/11/21/africas-age-burden/

- Apolitical. (2022). *Government innovation labs A global directory*. Apolitical. Retrieved July 13, 2022, from https://apolitical.co/pages/government-innovation-lab-directory
- AUC/OECD. (2019). *Africa's Development Dynamics 2019*. OECD iLibrary. Retrieved September 13, 2021, from https://www.oecd-ilibrary.org/development/africa-s-development-dynamics-2019 c1cd7de0-en
- Boakye, B. (2021). Social Media Futures: How to change the African narrative. Institute for Global Change. Retrieved January 13, 2022, from https://institute.global/policy/social-media-futures-how-change-african-narrative
- Bureau of European Design Association. (2017). *Policy lab: What is the future of design for policy-making?*BEDA. Retrieved January 10, 2022, from https://www.beda.org/news/policy-lab-what-is-the-future-of-design-for-policy-making/
- Chuene, N. D., & Mtsweni, J. (2015). *The adoption of crowdsourcing platforms in South Africa*. Retrieved January 13, 2023, from https://ieeexplore.ieee.org/document/7190561/
- Connecting Africa. (2021). Crowdsourcing platform Toloka accelerates push into Africa.

 Retrieved June 13, 2022, from https://www.connectingafrica.com/document.asp?doc_id=771630
- CFPB (Consumer Financial Protection Bureau). (2016). Project Catalyst Report: Promoting Consumer-Friendly Innovation. Washington, D.C.: CFPB.
- Dada, D. (2006). The failure of e-government in developing countries: A literature review. The Electronic Journal on Information Systems in Developing Countries, 26(1), 1-10.
- DeSeve, G. (2020). The road to agile government: Driving Change to Achieve Success.

 Retrieved November 18, 2021, from https://napawash.org/uploads/The Road to Agile Government.pdf
- Druckman, A. (2010). *Agile drivers*. Retrieved November 18, 2021, from https://www.projectmanagement.com/contentPages/article.cfm?ID=253688&th isPageURL=/articles/253688/Agile-Drivers# =
- Early, G. (2020). "Afrocentrism". Encyclopaedia Britannica. Retrieved June 28, 2022, from https://www.britannica.com/event/Afrocentrism
- Eggers, W. D., Mills, A., Verheggen, H., & Joergensen, C. (2021, May 8). *Agile government*. Deloitte Insights. Retrieved January 13, 2023, from https://www2.deloitte.com/us/en/insights/industry/public-sector/government-trends/2021/agile-at-scale-in-government.html
- Fatile, O.J. & Igbokwe-Ibeto, C.J. (2012). "Nigerian public sector and the challenges of human capital development: The way forward". Scottish Journal of Arts, Social Sciences and Scientific Study, 1(2), 11–23.
- FCA (Financial Conduct Authority). (2015). Regulatory Sandbox. London: FCA.

- George, T. (2020, December 9). Hermeneutics. Stanford Encyclopedia of Philosophy. Retrieved January 13, 2023, https://plato.stanford.edu/archives/win2021/entries/hermeneutics/
- Glossop, A. (2021). Regulatory sandbox: 5 things to know. Retrieved from https://www.ideagen.com/thought-leadership/blog/regulatory-sandbox-5-keythings-to-know
- Government AI readiness index 2021. Oxford Insights. (n.d.). Retrieved January 13, 2023. from https://www.oxfordinsights.com/government-ai-readiness-index2021
- Government ai readiness index 2022. Oxford Insights. (n.d.). Retrieved January 13, 2023, from https://www.oxfordinsights.com/government-ai-readiness-index-2022
- INSEAD. 2021. The Global Talent Competitiveness Index 2021: Talent competitiveness in times COVID. Retrieved November 12. of 2022 from https://www.insead.edu/sites/default/files/assets/dept/fr/gtci/GTCI-2021-Report.pdf.
- ILO. (2021, April 9). Covid-19 recovery must be human centred. Retrieved November, 15, 2022, from https://www.ilo.org/global/about-the-ilo/newsroom/statementsand-speeches/WCMS 779257/lang--en/index.htm
- Jenik, I and Lauer, K. (2017). Regulatory Sandboxes and Financial Inclusion. Working Paper. Washington D.C. CGAP.
- Kurnia, T., Nurhaeni, I. D. A., Asrinaldi., A., & Putera, R. E. (2022). "Leveraging agile transformation: Redesigning local government governance." KnE Social Sciences, 7(5), 720-733.
- Lastovka, M. (2015). "Crowdsourcing as new instrument in policy-making: Making the democratic more engaging." European View, process 14(1), 93-99. 10.1007/s12290-015-0345-7
- Mogalakwe, M. (2006). "The use of documentary research Methods in social research." African Sociological Review, 10(1) 221-230.
- McBride, K., Kupi., M., & Bryson, J. J. (2021). Untangling agile government: On the dual necessities of structure and agility. In Agile government: Concepts and practice for future-proof public administration. World Scientific Publishing, Singapore.
- Mergel, I. Gong, Y., & Bertot, J. (2018). "Agile government: Systematic literature review and future research." Government Information Quarterly, 35, 291-298.
- Mutiarin, D., Sudiro, R., & Misran, M. (2021). Design of E-public service in realizing agile government based on information technology: Case study in Indonesia. Iapa Proceedings Conference, 17. https://doi.org/10.30589/proceedings.2021.512
- Naz, R., & Groves, E. C. (2020). "Agile governance in practice: Stories of Agile successes of the Government of Samoa." Journal of Samoan Studies, 10(2), 35-41.
- Ngari, L. (2022). Regulatory sandboxes in Africa. Empower Africa. Retrieved November 10, 2022, from https://empowerafrica.com/regulatory-sandboxes-in-africa/



- Nuottila, J., Aaltonen, K., & Kujala, J. (2016). "Challenges of adopting agile methods in a public organization." International Journal of Information Systems and Project Management, 4(3), 65-85.
- Ndung'u, N & Signe, L. (2020). Capturing the Fourth Industrial Revolution: A regional and National Agenda. Retrieved November 10, 2022, from https://www.brookings.edu/wpcontent/uploads/2020/01/ForesightAfrica2020Chapter5 20200110.pdf
- Organization for Economic Co-operation and Development (OECD). (2020). Policy note on Africa: The future of production: The case for regional integration. Retrieved November 10, 2022, from https://www.oecd.org/dev/EMnet-Africa-Policy-Note-2020.pdf
- PwC. (2007). The road ahead for public service delivery: Delivering on the customer promise. Retrieved November 10, 2022, from https://www.pwc.com/gx/en/psrc/pdf/the-road-ahead-for-public service delivery.pdf
- Ramesh, P. (2018, September 19). 8 Ways Artificial Intelligence can improve DevOps. Packt Hub. Retrieved January 13, 2022, from https://hub.packtpub.com/8-ways-artificial-intelligence-can-improve-devops/
- Salem, F. (2016). A smart city for public value: Digital Transformation through agile governance the case of "Smart Dubai". Retrieved June 10, 2021,from https://www.researchgate.net/publication/294872032 A Smart City for Public Value Digital Transformation through Agile Governance
- Santiso, C. (2020). Can agile governance restore trust in government? Lessons from Latin America. Retrieved June 10, 2021,from https://www.researchgate.net/publication/343050580 Can Agile Governance Restore Trust in Government
- Stefanini Group. (2021). Can agile and artificial intelligence work together? Retrieved June 10, 2021, from https://stefanini.com/en/trends/news/can-agile-and-artificial-intelligence-work-together
- Sutherland, E. (2019). The Fourth Industrial Revolution the case of South Africa. Politikon, 47 (2), 233-252. https://doi.org/10.1080/02589346.2019.1696003
- Taeihagh, A. (2017). Crowdsourcing: A new tool for policy-making? *Policy Sciences*, *50*(4), 629–647. https://doi.org/10.1007/s11077-017-9303-3
- The European Commission Joint Research Centre. 2016. Public policy labs in European Union member states. Retrieved June 10, 2021, from https://blogs.ec.europa.eu/eupolicylab/files/2016/10/Mapping-policy-labs-in-EU-MS.pdf
- TheGOVLab. (2022). CrowdLaw. Retrieved January 10, 2023, from https://thegovlab.org/project/project-crowdlaw
- United Nations Secretary-General's Special Advocate. 2022. Briefing on regulatory sandboxes. Retrieved January 13, 2023, from

- https://www.unsgsa.org/sites/default/files/resources-files/2020-09/Fintech Briefing Paper Regulatory Sandboxes.pdf
- United Nations Educational Scientific and Cultural Organisation (UNESCO). (2022). Concept of Governance. Retrieved January 13, 2023, from http://www.ibe.unesco.org/en/geqaf/technical-notes/concept-governance
- Vejseli, S., Rossmann, A., & Connolly, T. (2020). Agility matters! Agile mechanisms in IT governance and their impact in firm performance. Retrieved June 13, 2021, from https://scholarspace.manoa.hawaii.edu/server/api/core/bitstreams/cbf05456-e0f0-4455-b994-9d10b8bdbad1/content
- Wellstead, A. M., Gofen, A., & Carter, A. (2021). "Policy innovation lab scholarship: Past, present, and the future introduction to the special issue on policy innovation labs." Policy Design and Practice, 4(2), 193–211.
- Wessels, J. S. (2021). A policy instrument to relieve child poverty: The case of the child support grant in South Africa. In: J. S. Wessels, T. Potgieter, & T. Naidoo (Eds.), *Public administration challenges cases from Africa* (51-78). Juta.
- Whicher, A. (2021). "Evolution of policy labs and use of design for policy in UK government." Policy Design and Practice, 4(2), 252–270.
- World Bank. (2020). Doing business 2020: Comparing business regulation in 190 economies. Retrieved January 13, 2022, from https://openknowledge.worldbank.org/bitstream/handle/10986/32436/978146 4814402.pdf?sequence=24&isAllowed=y
- World Bank. (2022). Key data from regulatory sandboxes across the globe. Retrieved October 1, 2022, from https://www.worldbank.org/en/topic/fintech/brief/key-data-from-regulatory-sandboxes-across-the-globe
- World Economic Forum. (2018). Agile Governance: Reimagining Policy-Making in the Fourth Industrial Revolution. Retrieved January 13, 2022, from https://www3.weforum.org/docs/WEF Agile Governance Reimagining Policy-making 4IR report.pdf
- World Economic Forum. (2019). Agile governance for Creative Economy 4.0. Retrieved December 13, 2021, from https://www3.weforum.org/docs/WEF Agile%20Governance for Creative Economy 4.0 Report.pdf
- World Intellectual Property Organization. (2021). Global Innovation Index 2021: Tracking innovation through the COVID-19 Crisis. World Intellectual Property Organization.

