You're listening to TechTank, a biweekly podcast from the Brookings Institution exploring the most consequential technology issues of our time, from racial bias in algorithms to future work. TechTank takes big ideas and makes them accessible.

I'm Darrell West of the Brookings Institution and I would like to welcome you to our TechTank podcast. In this episode my colleague Chinasa Okolo will talk with Landry Signé about his new Brookings Press book entitled "Realizing Africa's Potential: A Journey to Prosperity." The two of them analyzed the opportunities and challenges facing Africa's emerging industries.

Thanks for joining the podcast I'm Chinasa T. Okolo, fellow in the center for technology innovation at the Brookings Institution today it we're joined by Landry Signé, a senior fellow in the global economy and development program and the Africa growth initiative at the Brookings Institution. He was previously a David M. Rubenstein fellow at Brookings his career in research spans the areas of global political economy global governance and sustainable development he's also the author of the upcoming book realizing Africa's potential a journey to prosperity. Thank you so much for joining us today, Landry.

Thank you very much for having me, Chinasa.

We'll get right into the questions that I have for you today. Can you tell us about the inspiration behind writing realizing Africa's potential?

This is a wonderful question, Chinasa. As a matter of fact, my two recent books one released 2023 is on Africa's fourth industrial revolution where I look at the biggest tech trends on the continent and how there are transcending the primary secondary tertiary sector mostly by the public and private sector shows us why and why the leaders who are the followers on the strategy to leverage the fourth industrial revolution and merging technologies to achieve Africa's prosperity. And just before that book at the one I released on own locking of it got business put on shot was also covering some of the key business trends on a the continent and with eight sectors which way discuss in that specific books are on I decided to follow up with this book on realizing Africa's potential because I wanted to provide a holistic perspective and do a deep dive on some of the sector that were not covered yet and as you know over the past few decades the continent has gone from being described as a hopeless to being recognized as one of the fastest growing regions in the world and I wanted to show the evidence behind the most recent trends while also acknowledging the challenges on discussing the strategies to realize Africa's potential.

Thank you so much for that background, so why do you believe now is critical to examine Africa's economic and demographic trajectory?

Africa is really incredible in terms of potential. The first thing to acknowledge is that the potential of the continent is more important than what most people think and let me set the scene perhaps by sharing some of the key trends shaping the future of the continent.

So the first trend that I would like to highlight the fact that Africa's economic transformation on business potential or are more substantial than many think. Africa is one of the world's fastest growing regions with many of calls growth narrative a mountain some going to be switched out forming but we also have some countries which are behind but acknowledging the diversity of the continent is extremely important for example trade in and with Africa has grown to one great person in the last decade outperforming global operates which weigh about one hundred and ninety six percent but when most people speak about trade done this already considered that perspective the second trend that that want to highlight is really rapid population growth and that growth of the population in Africa would be a phenomenal opportunity, depending on us to weigh down our democratic demographic dividends say. By the end of the century Africa will represent about 40 percent of the global population, & by 2050 Africa will represent between 25-26 percent of the global population as well, so it will really be important when thinking about technology. The population is quite young, when thinking about economic prosperity so we consider that population growth and the policy option which would help turn the growth into a demographic dividend. Other trends that I would like to also highlight are that it's not only demographic growth. We have increased household consumption and business spending representing a unique opportunity for trade and investment . As a matter of fact by 2050 Africa will have 16.12 trillion of combined consumer and business spending so this is also a key trends that I would like to highlight. A fourth trend is the rise in global partnerships and competition between traditional and new players on the continent. As a matter of fact, partnerships and sources of foreign investment in Africa have significantly diversified in the past decade. For example, in 2009 China became the region's prime trading partner with trade surging between 2006 and 2016. Imports increased by 233 percent and exports also increased by 53 percent so again this is another illustration of the incredible growth potential on the continent. The fifth trend that that want to highlight is the rapid urbanization which is being accompanied by rapid rural population growth. So, by 2040, Africa will be home to 12 cities of more than 10 million inhabitants, adding ten more cities to the current 2, Cairo and Lagos and 19cities will also have pollutions between 5 and 10 million meeting that one city in total will have over five million habitants across the continent. And this is really important because when we think about whether from the business and investment technology perspective, we are not only considering a given country or even the continent as a whole but we are also considering specific cities, as some cities may have more habitants than some countries. So that is the fifth trend. Let me expand on the sixth trend, which is associated with the fact that Africa has made tremendous progress in mobilizing resources for infrastructure development, working hard to bridge the gaps in information and communications technology and energy, water, sanitation, and transportation. Of course, we still have a monumental gap so we should acknowledge that gap, this is substantial deficit. But despite the deficit, progress has neem made that need to be acknowledged. Again, despite the remaining deficit, the infrastructure consortium for Africa reported for example that between 2013 and 2017,

annual funding for infrastructure development in the region was about 77 billion, which was an amount twice as much as the annual funding average for the six years of the first years of first years of the 2000s, so again growth but still a gap so a lot of effort & funding needed there. So the seventh trend that I want to emphasize is the rapid digitalization and the increased technology innovation and the accelerated digital revolution & as you mention, my previous book extensively discussed that question which is often characterized by diffusion of technology whether digital, biological, and technological dimensions which are inclusive of artificial intelligence, big data drones, automated vehicles. I can expand of goals on regional integration on the African continent that a free trade area which is one of the eighth trends, or I can also speak about the demand for accountability, the ninth one, the increased role of the diaspora in fostering investment, as the tenth one, or the green revolution, or empowering woman which is making a monumental difference in bridging the economic gap, but let me pause for now. As you can see when I speak about some of these key trends, I'm very excited so I can speak out extensively.

Of course, we always love enthusiasm, and I also really love to get to some of the later topics that you mention particularly as we consider the opportunities in Africa's growth. For example, you mentioned and highlighted key emerging industries like healthcare and entertainment, agriculture, manufacturing, logistics, and much more. Which of these do you think holds the most immediate promise for advancing Africa's growth and why?

So, when I spoke about the growth of the household consumption and even the combined household consumption and business spending if we think about the household consumption only, by 2030 about 50 percent of the household consumption would be concentrated in three countries: Nigeria Egypt and South Africa. But more importantly some of the largest sectors would include first food and beverages, but you also have second consumer groups which are inclusive of education and transport, so you also have a third largest area for household consumption, the housing sector, people need to have quality housing. I would also add as the following ones: healthcare, financial services, and telecommunications so those are some of the largest sectors at least for household consumption. But we also have, and I like to dissociate the household consumption from the business spending, because in terms of business spending the largest sector will also be agriculture and agri-processing which would be followed by manufacturing construction, utilities, and transportation, wholesalers and retailers. In all areas, including banking, insurance, telecommunications and IT, we will see substantial growth so those are some of the largest sectors on the continent and the sectors which would progress the most. I think the reason why technology and emerging technology and the digital revolution will be extremely important is because they will also help to shift and to substantially increase productivity on the continent and to address some of the most important challenges and of course. I really like t the critical importance of technology because of the

potential to improve productivity and accelerate structural transformation and diversification but also in improving governance effectiveness, accountability and transparency with new tools.

Great thank you for the overview. I'd also left to get more into the investment and also the policy side, what we consider the key trends for advancing Africa's digital transformation as well and so your book also provides many insights for investors to understand the dynamics of this respective landscape and for investors and businesses interested in pursuing opportunities in Africa and one of the most critical factors to consider when entering these markets.

We have many factors; I think I briefly highlighted the importance of productivity to diversify economy the critical importance of governance effectiveness accountability and transparency and security which is associated with geopolitics. We also need human capital, the skills needed or the labor market, to which it's important to consider infrastructure and energy, the labor of financing especially including some of the corporate challenges and the cost of management, including business failure which includes management cost, marketing, and finances. So those are some of the dynamics but of course I don't want to speak about Africa as if it is a homogeneous entity, Africa it's quite heterogeneous, & it is extremely important to acknowledge the diversity of experiences of and approaches to do to do business with African countries so multinational companies trying to do business with South Africa, Nigeria, Morocco or Egypt may have a different approach compared to whether they're targeting a small country like Mali. for example, or if it's in the consumer goods market, but in natural resources perhaps those differences may be less important. Now if I highlight some strategy that the private sector in particular should use overall, we have conducted some studies with some of my colleagues I'm also the co-chair of the world economic forum, the regional action group for Africa and so we release a few strategies and action plans with the involvement of many of the largest multinationals, at least that way we got our information. A key dimension is really a strong partnership and trust with government and with the communities. Many of the companies which were the most successful were those able to engage in a very effective way along those lines so that is one of the key points. Another point is really the prioritization of local partners that really understand the distinct challenges and complexity of each individual country and community. So, it is complex for companies without that deep understanding of the local dynamics and without the trust in the strong partnership with the local community to be as successful as the companies which are doing so. A good illustration would be Coca Cola, a corporation which has been successful on the continent. They are really partnering with locals in terms of understanding the dynamics and making sure that local partners help with successful implementation, aligning also the needs of the company with governments and community where possible to overcome infrastructure and human capital challenges is key. So many of the companies which are very successful

will also come up with some specific education programs or collaboration to ensure that the human capital needed for success is successfully implemented, that the training programs to train the human capital needed for this success to be implemented. Of course you have some companies like the OCP, for example, we partnered with the Mohammed VI Polytechnic University to develop joint training programs. So, aligning this strategy with future trends and demand in African trade is key, that's why also I wrote this book looking at the long-term perspective of Africa by 2050, so it's extremely important to understand the African continental free trade area and what it brings to the success of the continent is key. Leveraging digital tools and digital transformation is also a critical dimension, as you know it you know in the eighties or early nineties New York City had more mobile phone subscribers than the continent of Africa, when now the continent has more mobile phone subscribers than many times the population of the United States, so those key trends are extremely important & the continent is leading the way we speak about some of the digital medical options, so you lose the use of a drone for medication delivery and order pharmaceutical products online. So, considering different types of diversification bases & company strengths & characteristics and local needs Ind overcoming internal corporate challenges are also key dimensions that companies should adopt. Of course, there's no one size fits all approach and everything needs to be, let's see, tailored, to the specific challenges and would not only speak to broad corporate governance, the importance of which is key to resiliency, capital raising and scaling businesses of financial management and so those dimensions are also extremely important. So again, the private sector represents a unique opportunity so I'm very hopeful because the future of Africa itself I think would also be associated with the future of its private sector. I'll be happy to of course expand on some strategies that the government should also be using.

Yes that makes a lot of sense and to continue on the topic of policy and also how governments can play a strong role in enabling investment and also good processes to enable more effective digital transformation, what role do you believe African policymakers played in shaping an environment that's conducive to sustainable growth and also to attract investment?

Thank you. In fact, the private sector's role is critical also in realizing African potential given the diversity and heterogeneity and complexity of the 54 African economies. There is no one size fits all solution for all African governments, but what I have seen is that they share some key characteristics, so some key strategies that I would propose is to seriously consider the process of structural transformation of the African economy and diversification of these sources of growth. This is key for setting the continent on a journey to prosperity and really accelerating the process of global income convergence. It's extremely important and the lack of, or the limited diversification, on the continent is a challenge that governments have to face. To be successful at achieving the potential, the government through design and successfully implementing robust policies that drive

productivity and growth, including through the promotion of investment, capital formation, competition, innovation, technology and market efficiency, as well as investing in infrastructure, mechanization, & human capitals including skills & increasing scale of production. In fact, outperforming African economies do better than underperforming countries in these areas so that's just one key dimension. Another dimension is really to invest in Africa's human capital, youth, women, & education. By 2060, Africa will be home to half the global working age population, making it the fastest growing youth population in the world, in contrast to some of the countries such as Japan or Italy who would be battling declining and aging populations. Africa is key I think to providing prosperity and investing in the young people of the continent will really play a key dimension in raising the productivity that I mentioned earlier, in diversifying the economy, in building a more competitive economy. So, another policy option which is important is to build very strong policies that promote income and create demand, whether nationally or regionally, and from a regional perspective inclusive of the African continental free trade area. We can also go to the global dimension, and this is important because realizing Africa's potential requires not just leaving no one behind but also increasing both household income and middle class finances through higher wages, also generating quality jobs. So this is a key dimension that policy makers should really follow, and they should also lead the way in promoting Africa's regional integration, supporting and accelerating the implementation of the African continental free trade area, and that's you know, the goal of the African continental free trade area is to create a single market at a continental level and it is important order to implement the trade agreement successfully to harmonize regulations across countries and put infrastructure in place to support the acceleration of intra-African trade. As you now, when African countries are going to trade with one in another, they trade mostly manufactured products compared to when they trade with the rest of the world. Expanding Africa's role in the global economic, financial, and political architectures, and its global partnership to ensure that decisions affecting the continent are better representative of its perspective and more aligned with realizing Africa's potential would also be important, so African country leaders have to come together on various platforms to speak with one voice. An additional dimension that I want to highlight is the acceleration of the green growth and transformation, including the global energy transition and Africa's supply chains of critical minerals will be important for the country and not just to expose the raw material, but transform on the continent to lead that global green transition. Given our role, given our job, I think I should also mention that increasing the capacity of research institutions to participate in research and development activities and protecting intellectual property will be extremely important. Some of the fastest growing economies globally and some of the most successful ones are also the one ones who invest in research and development and protect intellectual property which are associated with unlocking productivity and innovation technological development. Let me finish with two or three points. One is really leveraging the power of the fourth industrial revolution & of emerging technology to address the many challenges that the continent is facing and

whether related to primary, secondary, or tertiary sectors. We have countries such as Mauritius, Kenya, & Rwanda which are playing a critical role there you also should include financing and patient capital for long term economic performance on the continent, because in order to implement everything I mentioned, financial resources are needed and those financial resources. Many of the key investors are not patient but we need patient capital to ensure sustained economic growth and prosperity. So let me finish by just saying that strengthening government effectiveness and bridging the implementation gap, the gap between policies elaborated, formulated by policymakers and mediators and implementation outcomes will also be a critical dimension to realize potential.

So how do you see Africa's growth influencing global markets and geopolitics over the next few decades?

This is an extremely important question. As I mentioned, Africa's population will reach about 40 percent of the global population by the end of the century. This means that there's no global prosperity without Africa's prosperity by the end of the century. The success of the global economy will be directly associated with the continent. Let me just provide one illustration with critical minerals. Critical minerals of Africa are how many African countries are home to, an important reserve of African critical minerals needed to achieve a successful global green transition, energy transition. So, in order for the world to really achieve that prosperity and energy transition and economic prosperity, inclusive economic prosperity, the success of the continent will be prominent. Another dimension I want to emphasize, I mentioned earlier the rise of global partnerships, the competition between, of course, the traditional players on the continent such as the United States, EU countries including France, so some of the new partners which have also Beemon the on the continent for many years but have the more prominent in competing, including China, Russia, Turkey, Indonesia, and Brazil. Most players understand the critical importance of engaging with Africa, whether in terms of trade or investment, but also of aligning with African countries when it comes to platforms. African countries represent an important proportion of the 98 nation General Assembly, so for a decision to be made the support of African countries is critical. So the direct response to your question is that the future of the world in terms of prosperity but also in terms of peace and security would also be associated with the future of Africa, especially by the end of the century, and it is now not later that this critical role should be played both by African countries which would take more ownership of their own destiny and shaping of the world, but also by the African partners who should acknowledge that the twenty first century is different and that considering Africa as a partner and respecting the place the continent deserves in global decision making platforms will also be important in contributing to their own prosperity. A win-win situation.

Thank you. There are so many great insights shared throughout your responses to questions on this podcast. To end this episode on a future-looking vision for Africa, if we were to revisit the continent in 2050 based on the strategies outlined in your book, what would success look like for the continent?

So, success for the continent, I think, is extremely important, but let me start instead of just speaking about success well for the continent by speaking about success for the men and women on the continent. Success of the continent would be a success of the people who are making the continent what the continent is now by, I mention by 2050 I think Africa more than 2.5 billion people, so we are really speaking about 25 percent, a little bit more, of the global population. For me we cannot speak about the success of Africa if many of those people are left behind so a successful continent will be a continent where of course we have economic prosperity. As I mentioned before the role of the private sector is critical, but the public sector also has an important role to play. Both should work hand in hand to achieve that success in collaboration with global partners, but ultimately what will make the difference is how the continent will be about to provide education to its young people. I highlighted the critical importance of size of the population on the continent, if I could just share a few statistics: only by 2030 we will have more than 57 percent of the population which is still under the age of 25 so as a matter of fact investments now in 2025 with the new generation by 2050 will really create a continent & which is drastically different. So, if you get a population with strong human capital, we speak about health, we speak about education, but also in terms of economy, economic diversification, higher productivity, more inclusive economy, full integration of women in the economy. Some studies have shown that by fully integrating women in the economy we can have an increase to almost 50 percent of the size of the economy depending on the country so again that dimension will really be extremely important, but Africa will also be leading the way in the fourth digital revolution and digital transformation, and not be a consumer but the producer, innovator, disrupter. We already have many countries which are leading the way in, specific areas but I think having a higher concentration of those will also be extremely important. I want to bring the governance dimension that you mentioned, and I mentioned earlier. The implementation challenge, the gap between the policy intention when policies are formulated and the implementation gap. This challenge is not just related to Africa, whether in the United States or Europe, I mean many of the countries around the world, one of the biggest challenges that policy makers face is how to bridge the gap between their policy intention & their implementation outcome but I think here too, the aspiration by 2050 is to have the smallest possible gap between those aspirations & the implementation, to really have inclusive & shared prosperity, sustained prosperity on the continent. I think this will be my perception of a successful Africa, where the children of Africa are successful themselves. It's not just about the country, not just by the corporations, but it's mostly about empowering the people of Africa.

This is great, thank you so much. We also appreciate you taking time to join the podcast today.

Thank you so much for having me.

So, I want to thank again, Landry Signé, for sharing his thoughts with us on his insightful research and forthcoming book: "Realizing Africa's Potential: A Journey to Prosperity." Thank you for listening to TechTank, a series of round table discussions and interviews with technology experts and policy makers. For more conversations like this, subscribe to the podcast and sign up to receive the TechTank newsletter for more research and analysis from the center for technology innovation at Brookings.