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AFRICA'S DIGITAL RENAISSANCE:

UNLOCKING TALENT AND DIGITAL SKILLS FOR THE FUTURE OF FINANCE



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ELEVANDI

SMU Singapore Management University | SMU Academy

LAGOS BUSINESS SCHOOL PAN-ATLANTIC UNIVERSITY

3i AFRICA SUMMIT
Innovation • Impact • Investment

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Introduction

Africa's youth, with over 60% of the population under 25, represent a crucial resource for driving sustainable economic development. According to the World Economic Forum, young Africans are expected to constitute 42% of the global youth population by 2030. This demographic shift presents an unprecedented opportunity for the region, with it being poised to expand its workforce by more than the rest of the world combined. As this young population enters the labour market, it is imperative to harness their potential effectively.

This report presents insights from a roundtable session that convened business leaders, academics from top universities, and tech entrepreneurs during the 3i Africa Summit 2024. The session focused on developing strategies to unlock Africa's youthful potential by equipping young Africans with essential digital skills. It highlighted the importance of academia-industry collaborations to address skills gaps and prepare the workforce for the digital economy.

Participants at the roundtable explored the facilitation of such partnerships through several key themes:

Theme 1: Leveraging Africa's youthful demographic for future growth.

Theme 2: Transforming Africa's workforce for the digital economy through academia-industry collaboration.

Theme 3: Harmonising regulations across the region to foster a conducive environment for digital advancements and sustainable economic growth.

These themes provide relevant new insights, bringing together the efforts of different businesses to address future-oriented skill development. It supports constructive public-private dialogue aimed at urgent and fundamental reforms of educational systems and business regulations. These efforts are crucial to preparing Africa's workforce for the jobs of the future, fostering technological advancement, and driving sustainable business growth.

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Executive Summary

This white paper provides a comprehensive overview of Africa's current landscape and challenges. It highlights the potential of the future of finance in Africa, talent strategies, and best practices to foster strategic collaborations between technology firms, academic institutions, and government agencies. These collaborations are crucial for driving innovation and cultivating a skilled workforce to support the development of finance and technology in Africa. Drawing insights from the roundtable discussion, this report highlights the key themes and recommendations essential for advancing the finance and technology industries through stronger academia-industry partnerships.

The following themes emerged as critical pillars for successful partnerships in these sectors:

Theme 1: Leveraging Africa's youthful demographic for future growth.
With the world's youngest population by 2030, investing in education that aligns with labour market demands is crucial for Africa. This involves not only providing basic education but also focusing on future-relevant skills and competencies. Despite rapid growth, Africa faces two main challenges: equipping its young population with the right skills and creating enough high-skilled jobs to meet current market demands. There is a lack of coordination among education providers, and uneven development in vocational and adult training systems. Proactive management is needed to redesign the traditional education curriculum, identify necessary skills, develop supportive policies, foster educational and industry partnerships, and ensure workforce adaptability, driving sustainable economic growth and securing a prosperous future for Africa's citizens.

Theme 2: Transforming Africa's workforce for the digital economy through academia-industry collaboration.
A robust partnership between academic institutions and industry is crucial for transforming Africa's workforce to meet digital economy demands. These collaborations leverage each stakeholder's strengths to foster innovation and growth in finance and technology. Academic institutions contribute through research, development, and updated curricula, equipping learners with the necessary skills for the future. Industry players provide practical training through internships, mentorships, and research funding; ensuring skills align with current and future industry needs. Together, they create a dynamic educational environment that prepares Africa's workforce to thrive in the digital economy, promoting financial inclusion and literacy across the continent.

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Theme 3: Harmonising regulations across the region to foster a conducive environment for digital advancements and sustainable economic growth.

The finance and technology sectors have rapidly evolved, driving global innovation in financial services and offering enhanced financial inclusion, efficiency, and personalised experiences. However, budding tech companies face significant regulatory challenges, especially across multiple jurisdictions with inconsistent frameworks. Establishing harmonised regulatory frameworks is essential to address these challenges and unlock technological innovation. This requires a collaborative approach among governments, regulatory bodies, industry stakeholders, and academic institutions. By standardising regulations and aligning practices, we can foster innovation, reduce compliance burdens, and facilitate the seamless expansion of technology services across borders.

These collaborations will enhance financial inclusion and literacy, creating opportunities for all segments of society to benefit from advancements in technology and fostering a dynamic and sustainable tech ecosystem across the continent.



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Theme 1: Leveraging Africa's youthful demographic for future growth

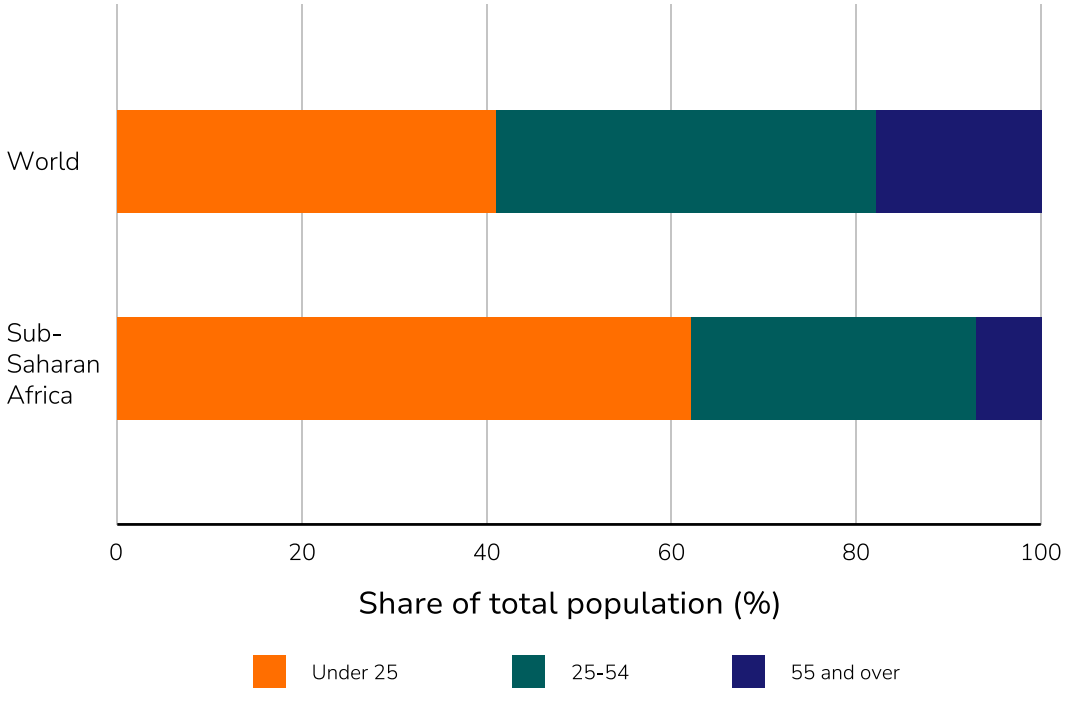
The future of finance in Africa, as envisioned by the roundtable participants, is poised to be both catalytic and transformative. Driven by innovative technologies, entrepreneurial endeavours, and significant capital investments, Africa's financial landscape is reshaping. The transition towards more efficient and inclusive financial systems is accelerating, with digital currencies and financial technologies emerging as viable alternatives to traditional monetary systems. Demonstrating significant innovation, particularly in mobile and digital technologies, Africa is witnessing a surge in investments and regulatory changes that will propel substantial growth and development within its financial sector. To sustain this momentum, Africa must leverage the potential of its young population, harnessing their energy and creativity to drive continued growth and innovation.

Opportunities

Young population

Sub-Saharan Africa is the world's youngest region today (Figure 1), housing 13% of the global working-age population, a figure expected to surpass 17% by 2030. The continent's working-age population is set to increase from 370 million adults in 2010 to over 600 million adults in 2030[1].

Figure 1: Sub-Saharan Africa population distribution by age



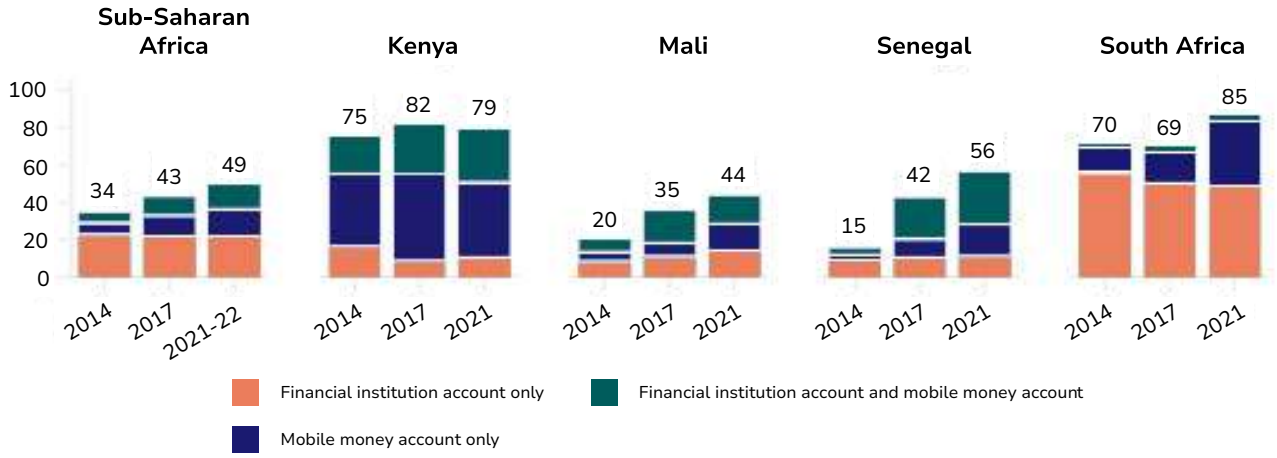
Source: United Nations Population Division

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Growth of digital adoption

The digital revolution has been a major catalyst for change in African workplaces, fundamentally transforming various sectors across the continent. According to a 2022 report by the African Development Bank, digitalisation is reshaping industries from agriculture to finance, introducing new business models, and significantly enhancing operational efficiencies[2]. In the financial sector, digital banking and mobile payment platforms are revolutionising how transactions are conducted, improving financial inclusion and enabling remote populations to access financial services (Figure 2). The integration of digital technologies is fostering innovation and entrepreneurship across the continent. Startups are emerging, developing solutions to tackle Africa's local challenges and needs. Partech, Africa's largest VC, reported in 2022 an 8% funding growth for the African FinTech sector, pointing to the increase of innovation in the FinTech ecosystem.

Figure 2: Adults in Africa with an account (%), 2014-2021/2022



Source: Global Findex 2021

Challenges

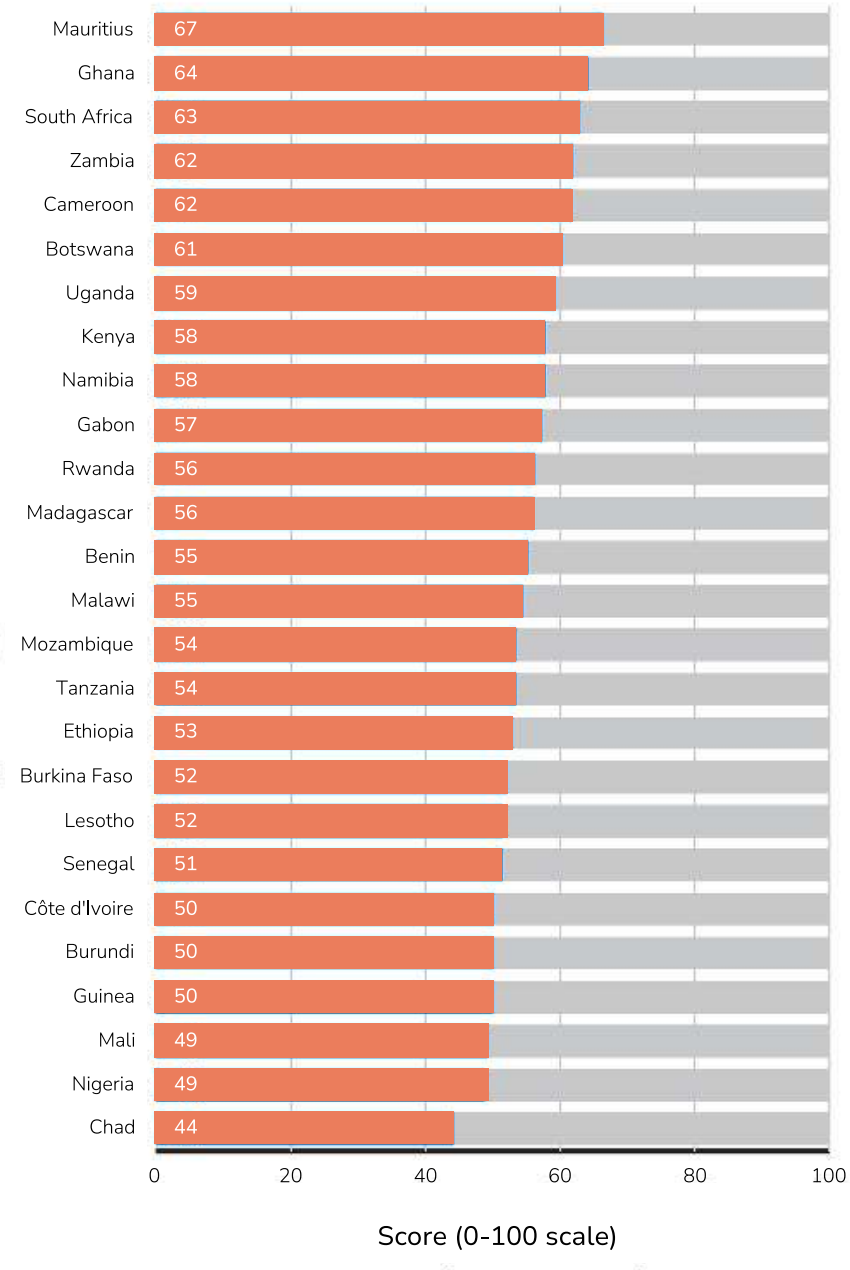
Underutilisation of human capital

Participants at the roundtable believe that by leveraging its demographic opportunity, Africa has the potential to unlock new economic possibilities driven by future industries and labour markets. This could enhance labour productivity, increase per capita incomes, diversify the economy, and position Africa as a catalyst for stable economic growth, high-skilled talent development, and job creation for decades to come.

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However, Africa needs to fully utilise its human capital potential and be thoroughly prepared for the disruptions to jobs and skills brought about by the Fourth Industrial Revolution[3]. According to the World Economic Forum's Human Capital Index, Africa currently captures only 55% of its full human capital potential on average, compared to a global average of 65%. Variations range from 67% to 63% in Mauritius, Ghana, and South Africa, to as low as 49% to 44% in Mali, Nigeria, and Chad (Figure 3)[4].

Figure 3: Human capital optimisation in Africa

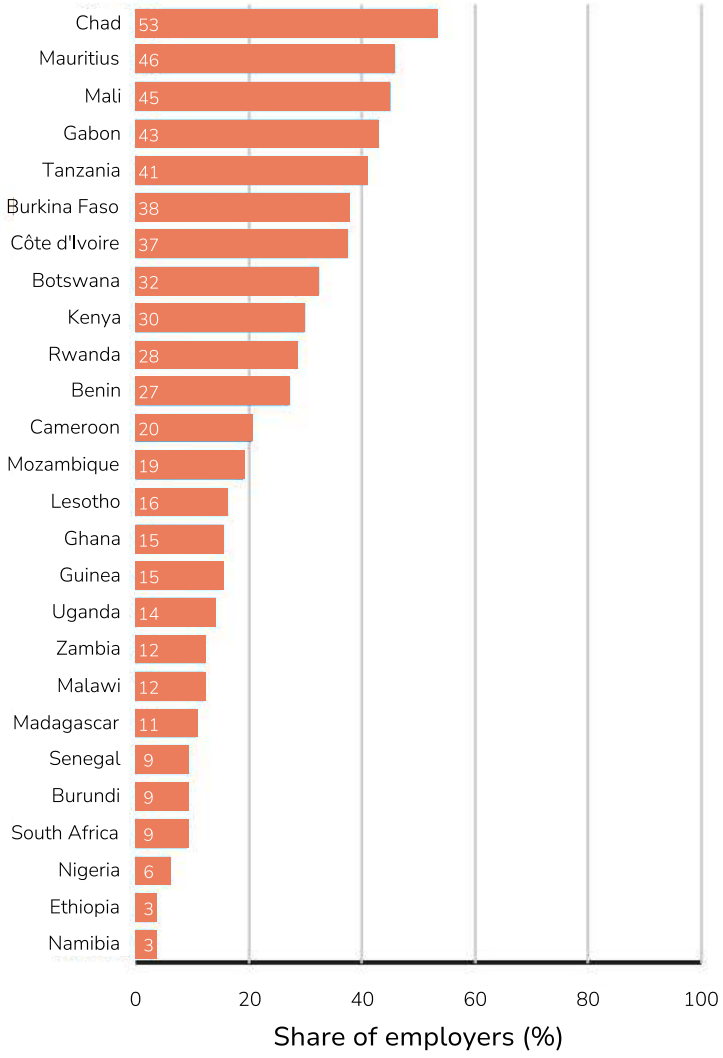


Source: World Economic Forum, Human Capital Index 2016.

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Despite rapid economic growth, a dynamic young population, and high labour force participation, Africa needs help creating quality, formal sector jobs. The region exhibits a high-skilled employment share of just 6%, compared to the global average of 24%. Common high-skilled jobs include roles like business analysts, teachers, bankers, accountants, and IT professionals. Countries like South Africa, Mauritius, and Botswana lead in high-skilled job availability, while others, such as Ethiopia and Nigeria, have large proportions of lower-skilled jobs. Formal sector unemployment, including among recent graduates, remains high in countries like South Africa, Nigeria, Mozambique, and Senegal. Many African employers cite inadequately skilled workforces as a major constraint to business scaling (Figure 4).

Figure 4: Share of African employers perceiving inadequate workforce skills as a major constraint to their business



Source: World Bank Enterprise Surveys

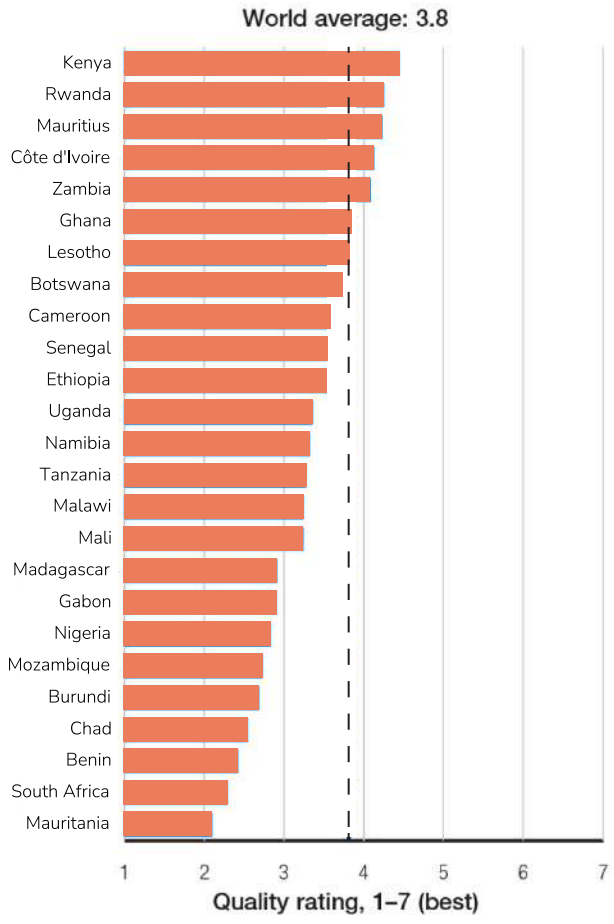
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The mismatch between skills and job opportunities

In addition to the mismatch between the number of educated young people seeking jobs and the availability of formal, high-quality positions, there is the added challenge of inadequate preparation for these roles. Currently, there is a lack of upstream and downstream coordination among Africa's primary, secondary, and tertiary education providers. Furthermore, the region's pre-primary, technical and vocational, adult training, and non-formal education systems remain unevenly developed.

For those enrolled in schools and universities, the quality of African education systems and their ability to meet the needs of a competitive economy, as perceived by respondents to the World Economic Forum's Executive Opinion Survey, remain a significant concern. These systems rank significantly below the global average, indicating that learners are not acquiring the knowledge and skills required for the digital economy (Figure 5). This concern is further corroborated by business leaders' difficulties in finding skilled workers for their enterprises. Several roundtable participants, who are business owners, expressed concerns about the difficulty of hiring professionals from Africa with the requisite digital skills. Even when such professionals are available, because of the limited supply, they often command higher salaries than overseas talent.

Figure 5: Quality of Africa's education systems

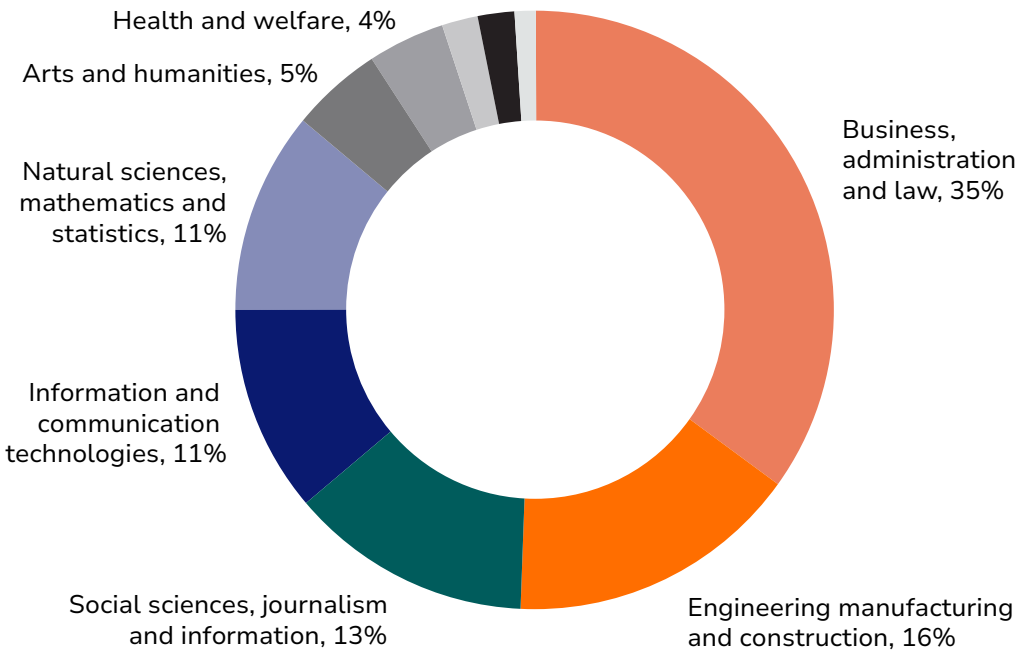


Source: World Economic Forum, Executive Opinion Survey

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Based on data shared by LinkedIn, African universities have consistently produced a significant number of graduates in traditional fields such as Business Administration, Law, Manufacturing, Construction, and Social Sciences (Figure 6). This trend indicates a potential misalignment between the skills being cultivated in academic institutions and the emerging demands of the digital economy. Given the rapid pace of digital transformation and its crucial role in driving economic development, there is an urgent need to prioritise the skill development of the existing workforce. This will likely include backward integration strategies to transform universities.

Figure 6: Distribution of fields of study among Africa's tertiary educated workforce



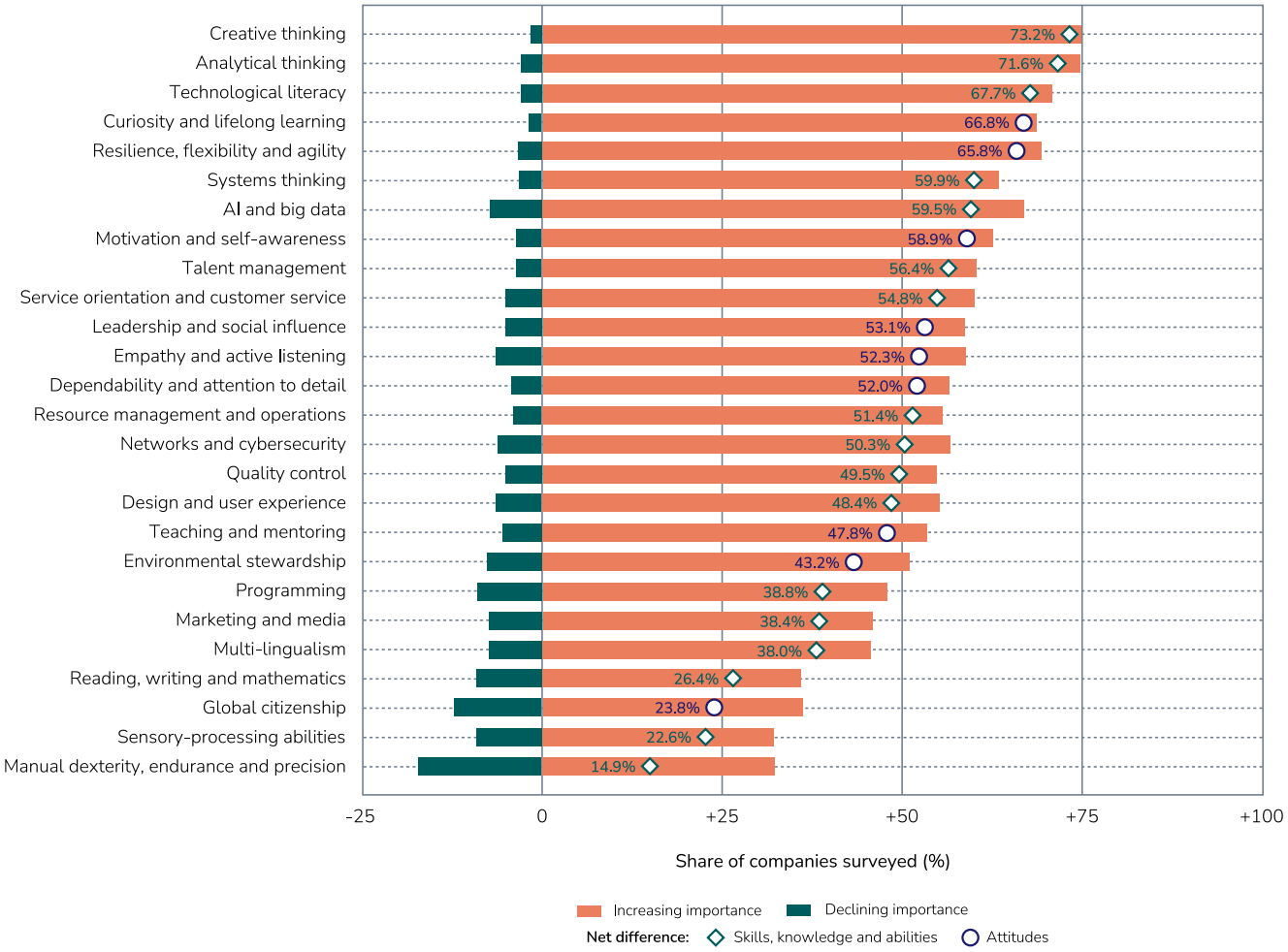
Source: LinkedIn

Importance of soft skills training

The roundtable emphasised that while technical skills are essential for the digital economy, soft skills like communication, critical thinking, and problem-solving, as well as non-technical, peripheral skills like governance and risk management, are equally important (Figure 7). These skills help professionals understand technology's impact, identify market-specific solutions, and collaborate effectively, driving innovation and sustainable development in Africa.

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Figure 7: Skills on the rise



Note

The Future of Jobs Survey uses the World Economic Forum's Global Skills Taxonomy.
The share of companies which consider skills to be of stable importance to their workers is not plotted.

Source: World Economic Forum, Future of Jobs Survey 2023.

Strategies to leverage Africa's demographic potential

To prepare for future labour markets, Africa must adopt strategies that equip the region with the necessary skills and education. The World Economic Forum's research on Realising Human Potential in the Fourth Industrial Revolution outlines key strategies like expanding early childhood education, ensuring 'future-readiness' of curricula, professionalising the teaching workforce, providing early workplace exposure and career guidance, investing in digital fluency and ICT literacy, offering robust Technical and Vocational Education and Training (TVET), fostering lifelong learning, and encouraging educational innovation.

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These strategies are essential for ensuring universal access and reform leadership across sectors. Africa's education systems must be long term and adaptable to constant changes. Four strategic areas need focus:

1. Future-readiness of curricula emphasising STEM: Provides comprehensive digital education for essential future job skills.

2. Digital fluency and ICT literacy: Enables learners to navigate digital landscapes proficiently.

3. Robust TVET programmes: Prepare students for technical careers, ensuring programme quality and effectiveness.

4. Lifelong learning infrastructure for adult training and upskilling: Supports continuous personal and professional development.

Participants of the roundtable also stressed the urgent need to create high-skilled jobs to meet current and future market demands and identified four key job groups:

- **Skilled professionals:** To address the needs of skilled professionals, the roundtable highlighted the importance of acquiring crucial technical skills in the technology sector, such as data analytics, cybersecurity, and software development. Additionally, a diverse skill set is required for various roles within the finance and FinTech industries, including compliance, risk management, and strategic business management. Addressing the current skill gaps and training needs is essential for professionals to keep pace with the evolving technological landscape.

- **Entrepreneurs:** For entrepreneurs in the startup space, essential skills include leadership, corporate governance, fundraising, and cash flow management. The roundtable identified areas for improvement in the existing support systems for startup founders and suggested ways to enhance entrepreneurial success. Providing better access to mentorship, funding opportunities, and business development resources can significantly boost the potential of startup and tech entrepreneurs.

- **Regulators and policymakers:** Developing competencies for effective regulation and policymaking in the dynamic environment of digital finance is crucial. Strategies should focus on creating a new generation of collaborative regulators and policymakers who understand the complexities of digital finance. This includes continuous training and development programmes to keep regulators updated on emerging technologies and industry trends.

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- **Investors:** In the evolving digital finance landscape, investors, especially angel and venture capital professionals, play a key role in closing the funding gap in the FinTech ecosystem. Essential competencies include understanding diverse funding mechanisms like crowdfunding and blockchain, financial acumen, and knowledge of emerging technologies such as AI. Active engagement and networking within the FinTech community are crucial for accessing high-potential startups. Conducting due diligence and understanding regulatory compliance mitigate risks. Beyond capital, investors should provide mentorship and strategic advice, promoting local investment through education and showcasing success stories. These skills drive innovation and economic growth, ensuring a sustainable FinTech ecosystem.

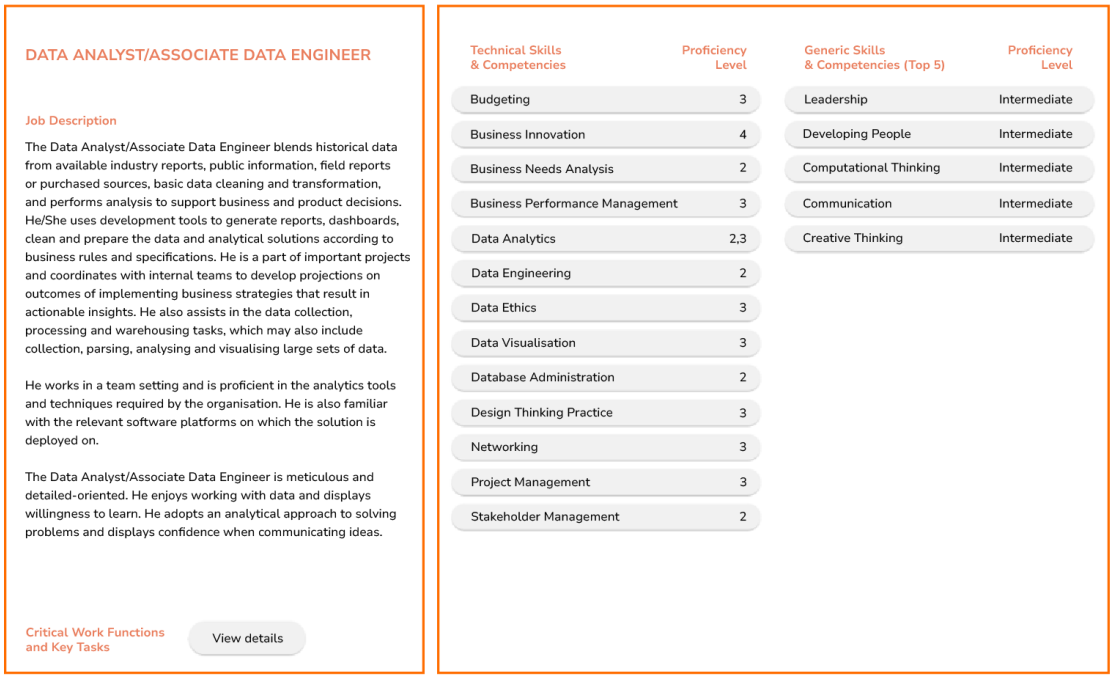
Prioritising digital education and developing a skills taxonomy to align efforts across all levels are essential. The skills taxonomy will identify the targeted high-skilled jobs for the job groups mentioned above and align the requisite knowledge and abilities for each role, subsequently detailing the required training roadmap tailored for each.

Singapore's Skills Framework is an exemplary model of a nationally implemented skills taxonomy. This framework outlines the required competencies across 34 industry sectors and over 1000 job roles, with the aim of fostering skills mastery and lifelong learning within the workforce. A sector-specific example is the Skills Framework for Infocomm Technology[5], a collaborative initiative supported by industry associations, educational institutions, training providers, organisations, and unions. The framework specifies the specific skills and competencies, proficiency levels, and job roles within the industry, detailing the existing and emerging skills necessary for mastery and continuous learning (Figure 8).

The Skills Framework for the Information Age (SFIA)[6], a global skills and competency framework for the digital age, is another model worth noting. In its eighth edition, the SFIA model describes IT roles and responsibilities across six thematic areas – strategy and architecture, change and transformation, development and implementation, relationship and engagement, delivery and operation, and people and skills. Like the Singapore Skills Framework, SFIA is designed to be flexible and amenable to different role views like digital transformation, data and data science, and information and cybersecurity.

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Figure 8: Extract from Singapore Skills Framework for ICT highlighting skills needed for a Data Analyst/ Associate Data Engineer



DATA ANALYST/ASSOCIATE DATA ENGINEER

Job Description

The Data Analyst/Associate Data Engineer blends historical data from available industry reports, public information, field reports or purchased sources, basic data cleaning and transformation, and performs analysis to support business and product decisions. He/She uses development tools to generate reports, dashboards, clean and prepare the data and analytical solutions according to business rules and specifications. He is a part of important projects and coordinates with internal teams to develop projections on outcomes of implementing business strategies that result in actionable insights. He also assists in the data collection, processing and warehousing tasks, which may also include collection, parsing, analysing and visualising large sets of data.

He works in a team setting and is proficient in the analytics tools and techniques required by the organisation. He is also familiar with the relevant software platforms on which the solution is deployed on.

The Data Analyst/Associate Data Engineer is meticulous and detailed-oriented. He enjoys working with data and displays willingness to learn. He adopts an analytical approach to solving problems and displays confidence when communicating ideas.

Critical Work Functions and Key Tasks — View details

Technical Skills & Competencies	Proficiency Level
Budgeting	3
Business Innovation	4
Business Needs Analysis	2
Business Performance Management	3
Data Analytics	2,3
Data Engineering	2
Data Ethics	3
Data Visualisation	3
Database Administration	2
Design Thinking Practice	3
Networking	3
Project Management	3
Stakeholder Management	2

Generic Skills & Competencies (Top 5)	Proficiency Level
Leadership	Intermediate
Developing People	Intermediate
Computational Thinking	Intermediate
Communication	Intermediate
Creative Thinking	Intermediate

Source: Infocomm Media Development Authority, Singapore

Additionally, creating a talent index to measure the effectiveness of these initiatives is crucial. This index would track metrics such as the availability of skilled professionals, employment rates in high-skill jobs, and the alignment of education outcomes with market needs. This will help Africa harness its demographic advantage, foster innovation, drive economic growth, and achieve a transformative future in finance.

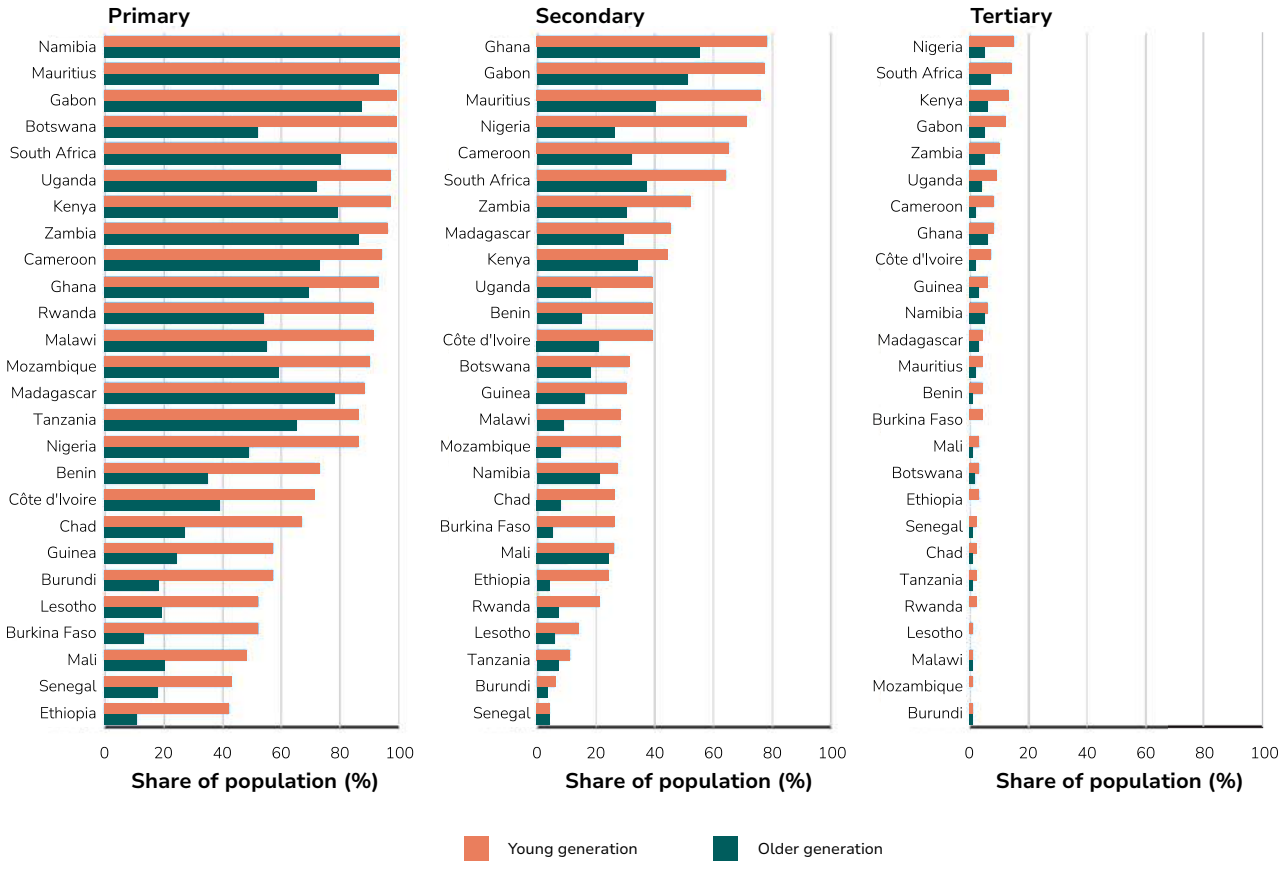


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Theme 2: Transforming Africa's workforce for the digital economy through academia-industry collaboration

The rapid advancement of technology and the dynamic nature of the global economy necessitates a workforce that is adaptable, skilled, and ready to meet contemporary challenges. Education has seen notable advancements in Africa, with younger generations significantly more educated than older generations (Figure 9).

Figure 9: Educational achievement of Africa's young and older generations



Source: World Economic Forum, Human Capital Index 2016

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Despite this, 45% of the population in rural areas and 7% in urban areas in Africa[7] remain underserved, leading to a gap that will persist for decades and affect multiple generations. The overall growth in education also conceals disparities and uneven outcomes within different segments of the education system. The region urgently needs to make strategic investment decisions to strengthen the foundations for the jobs and skills required in the future. The roundtable emphasised that academia-industry collaboration is crucial for this endeavour. By forging partnerships and combining their expertise, academic institutions and industrial organisations can create a powerful engine for innovation and drive sustainable economic growth.

Currently, collaboration between industry and academia in Africa is limited, leading to uncoordinated and potentially wasteful efforts. By fostering stronger partnerships between academic institutions and industry, Africa can ensure that its education systems align with market needs, preparing a workforce equipped to thrive in the digital economy.

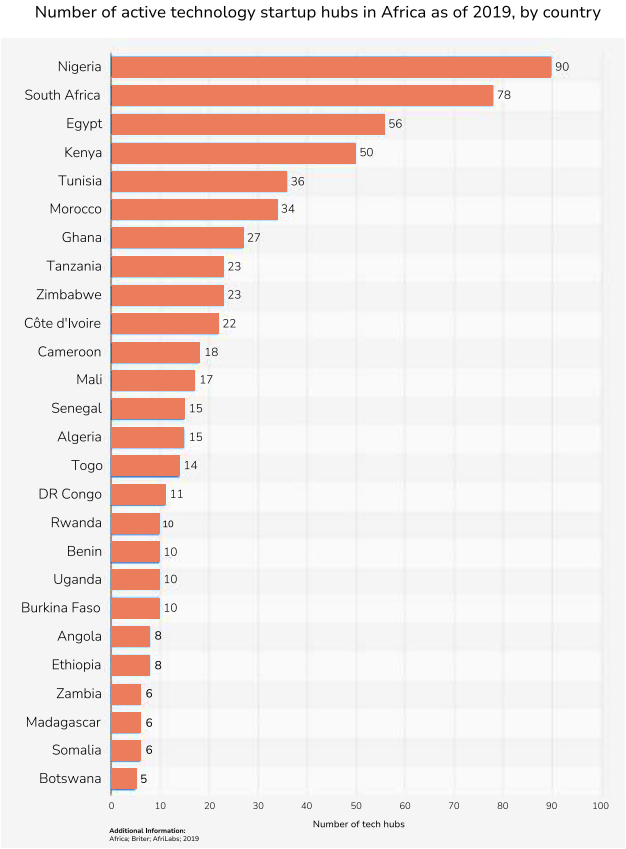
Academia-industry collaborations can take many forms, each aimed at bridging the skills gap and ensuring that graduates are well-prepared for the workforce. The following are some strategic examples and best practices:

- **Research partnerships:** Research partnerships between academia and industry are crucial for fostering innovation and providing students with valuable experience and insights to address industry-specific challenges. Collaborative research projects involve students and faculty working alongside industry experts to develop practical solutions. For example, the partnership between IBM and MIT focuses on joint research initiatives in artificial intelligence, tackling real-world problems with cutting-edge technology. Industry partners also provide funding for research projects relevant to their fields, enhancing innovation and practical applications. Singapore Management University's Living Analytics Research Centre collaborates with companies like Alibaba and DBS Bank, promoting advancements in data analytics and business intelligence.

- **Knowledge sharing and innovation hubs:** Knowledge sharing and innovation hubs play a critical role in bridging academia and industry by providing students with opportunities to work on real-world projects and fostering entrepreneurship. As affirmed by several roundtable participants, establishing innovation labs allows students to work on practical projects using state-of-the-art technology provided by industry partners. For example, the Singapore University of Technology and Design (SUTD) collaborates with various industry partners to run the SUTD-MIT International Design Centre, where students engage in projects that address real-world challenges using cutting-edge technology and design principles. Incubators and accelerators support startups and entrepreneurial ventures with mentorship and funding from industry partners. SMU operates the Business Innovations Generator (BIG) under the Institute of Innovation and Entrepreneurship, providing startup resources and support. While most African markets are endowed with startup hubs (see Figure 10), the variety and quality of services available varies.

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Figure 10: Active startup hubs per country



Source: Statista

Several participants emphasised the crucial role of mentorship, particularly for young entrepreneurs. Mentorship programmes can provide invaluable guidance, industry insights, and professional networking opportunities. Experienced professionals can mentor students and nascent entrepreneurs, helping them navigate the complexities of starting and growing a business. This support can accelerate innovation and enhance the likelihood of commercial success for new ventures.

- **Joint curriculum development and lifelong learning:** Joint curriculum development and lifelong learning initiatives are crucial for aligning academic programmes with industry needs and ensuring workforce adaptability. Companies collaborating with universities to create courses incorporating the latest industry standards, technologies, and practices are essential. SMU Academy, the professional training arm of SMU, exemplifies this approach. Likewise, Lagos Business School (LBS) adopts experiential learning methodologies, such as case-based, to develop managerial and leadership skills and competencies in open and customised settings. Leading companies and seasoned industry practitioners are actively involved in designing, developing, and delivering training programmes focused on upskilling and reskilling, ensuring their relevance and alignment with current industry standards and demands. Additionally, inviting industry professionals to give guest lectures or conduct workshops provides students with firsthand insights into real-world applications and emerging practices.

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For instance, SMU Academy regularly features guest lectures and workshops by industry leaders, enriching the learning experience and ensuring students are well-versed in contemporary industry dynamics. These collaborative efforts equip graduates with the skills and knowledge required to thrive in their respective fields.

Singapore's approach to lifelong learning and upskilling/reskilling, driven by the Ministry of Education through SkillsFuture Singapore (SSG), is particularly noteworthy. SSG provides a comprehensive framework for lifelong learning, offering diverse programmes and initiatives that cater to individuals at different career stages. These include SkillsFuture Credit, which offers financial support to Singaporeans to pursue various training courses, and the SkillsFuture Earn and Learn Programme, which provides structured work-study opportunities. This top-down approach has proven highly effective in fostering a culture of lifelong learning, supporting economic growth, and ensuring the workforce remains competitive and adaptable in a rapidly changing global economy.

- **Training and certification programmes:** Training and certification programmes are vital for equipping students and professionals with in-demand skills and keeping them updated with industry standards. Universities can offer certification courses developed with industry partners to ensure students acquire the necessary skills. For instance, SMU Academy offers the Industry Practice Master of Digital Economy, a stackable master's programme designed with input from industry experts to address the needs of the digital economy. This programme ensures that learners continue to deepen their skills mastery, enhancing their employability. Regular workshops and training sessions for students and existing employees help keep skills up to date. SMU Academy provides a range of professional development workshops and courses tailored to industry needs. These programmes offer continuous learning opportunities, ensuring participants stay abreast of the latest industry trends and technologies.

- **Advisory boards and committees:** Establishing advisory boards and committees with industry leaders is crucial for maintaining the relevance and effectiveness of educational programmes. Industry advisory boards provide valuable guidance on curriculum development, research priorities, and skill requirements. For instance, the MIT School of Engineering has an Industry Advisory Council comprising leaders from various sectors who offer insights into industry trends and workforce needs. Similarly, curriculum committees that include industry representatives ensure educational programmes remain current and aligned with market demands. At Stanford University, the Graduate School of Business includes industry experts in its curriculum committees to continuously update and refine its offerings, ensuring students gain the skills and knowledge needed in today's dynamic job market. LBS also adopts both approaches for the development and review of its curriculum and educational programmes.

Transforming education for workforce readiness in Africa

Transforming education for workforce readiness in Africa requires reshaping the skills development agendas of various countries to align with future job landscapes. Many African countries must improve their capacity to adapt to future job requirements but face limited exposure to these trends. These countries have a critical window of opportunity to implement long-overdue reforms, focusing on strengthening basic education and establishing robust Technical and Vocational Education and Training (TVET) systems.

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Countries like Kenya and South Africa have a higher capacity to adapt, but face more immediate exposure to job disruptions from the Fourth Industrial Revolution, thereby urgently requiring reskilling and upskilling efforts. These efforts should emphasise strengthening higher education and adult learning. Meanwhile, countries such as Ghana, Rwanda, and Mauritius, which are relatively well-positioned to adapt to future job requirements, must continue to promote lifelong learning and continuous upskilling to maintain their readiness.

To ensure a prosperous future, African nations must prioritise strategic investments in building a strong foundation for the jobs and skills of tomorrow. Despite the potential of its youthful population, several obstacles hinder effective workforce planning. These include a lack of understanding of disruptive changes, resource constraints, and misalignment between talent development and broader innovation strategies. Addressing these challenges requires fostering strong partnerships between academia and industry. Such collaborations are crucial for driving innovation by combining academic research with practical industry experience. This synergy promotes financial inclusion, aligns education with industry needs, and ensures the continuous updating of curricula to meet evolving labour market demands.

Next steps for African countries include:

1. **Enhancing academia-industry collaboration:** Develop joint research projects, internships, and mentorship programmes to bridge the skills gap.

2. **Updating educational curricula:** Align curricula with market needs, emphasising digital fluency and STEM skills.

3. **Implementing lifelong learning programmes:** Prepare students for technical careers, ensuring programme quality and effectiveness.

4. **Leveraging technology and innovation hubs:** Establish centres for knowledge exchange and professional development to connect talent with industry leaders.

These steps will help Africa harness its demographic advantage, foster innovation, and drive sustainable economic growth.



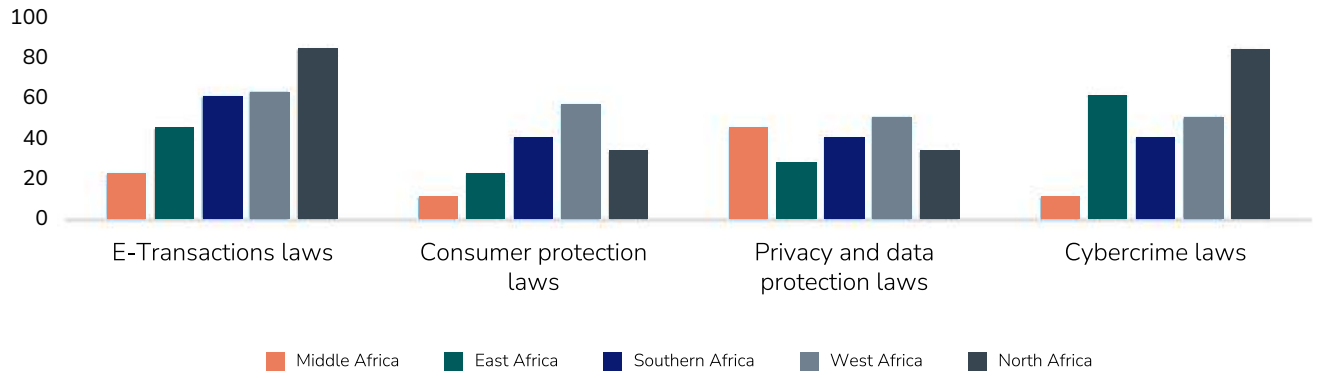


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Theme 3: Harmonising regulations across the region to foster a conducive environment for digital advancements and sustainable economic growth

One of the primary challenges for startup and tech entrepreneurs in Africa is the fragmentation of regulatory frameworks across different countries and regions. Each jurisdiction often has its own set of rules governing financial services, leading to a complex and sometimes contradictory regulatory landscape. As illustrated in Figure 11, there are varying levels of adoption of e-commerce legislation across different African regions, which complicates the regulatory environment for FinTech companies.

Figure 9: Share of economies with relevant e-commerce legislation in Africa, by region (%)



Source: OECD. 2018

As discussed at the roundtable, the fragmentation poses several challenges:

- **Compliance costs:** Tech firms must invest significant resources to comply with varying regulations in each market they enter. This includes legal fees, compliance personnel, and adapting technology to meet local requirements.
- **Entry barriers:** Inconsistent regulations can create high barriers to entry, particularly for smaller tech startups that need more resources to navigate complex regulatory environments.
- **Operational inefficiencies:** Differing regulatory requirements can lead to operational inefficiencies as companies must modify their business models and processes to comply with local laws, which can stifle innovation and slow down expansion.
- **Regulatory uncertainty:** The fast-paced nature of technological innovation often outstrips the ability of regulators to adapt. This can result in regulatory uncertainty, where companies are unsure of the legal implications of their activities, leading to cautious and limited expansion strategies.

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A harmonised regulatory environment is pivotal for fostering digital advancements and achieving sustainable economic growth across Africa. Effective policy initiatives and regulatory frameworks can be critical in shaping the skills agenda, driving innovation, and ensuring security and trust in new financial technologies.

Achieving unified regulatory frameworks requires a multi-faceted approach involving cooperation among governments, regulatory bodies, and industry stakeholders. Key strategies include:

- **Harmonising regulations:** This requires collaboration between governments and regulatory bodies to harmonise regulations, leveraging best practices and creating standardised guidelines for startups and tech entrepreneurs across Africa. This approach fosters innovation and provides necessary protections, supporting the secure adoption of new technologies and reducing barriers for startups and tech entrepreneurs.

  Harmonising regulations can reduce compliance costs by creating a standardised regulatory framework, making it easier and more cost-effective for firms to operate across different regions. Additionally, a unified regulatory framework can lower entry barriers, encouraging more startups to enter the market and fostering innovation and economic growth. Streamlined regulations enable companies to maintain consistent business models and processes, enhancing efficiency and supporting innovation. Furthermore, collaborative regulatory frameworks can adapt more quickly to technological changes, reducing uncertainty and promoting a stable environment for innovation.

  An example of this in practice can be seen in the European Union's approach to data protection through the General Data Protection Regulation (GDPR). Implemented to harmonise data privacy laws across Europe, the GDPR involved extensive collaboration among EU member states to draft comprehensive and balanced regulations. This process included consultations with industry stakeholders, legal experts, and the public. The GDPR established a single set of data protection rules for all EU member states, replacing diverse national regulations and reducing compliance costs for businesses. This standardised framework supported innovation by providing clear, consistent rules, creating a stable environment for businesses while protecting individual rights.

  Provisions like data portability within the GDPR further support innovation by allowing easy transfer of data between service providers. Harmonised regulations also lowered entry barriers for startups and tech entrepreneurs, making it easier for new companies to compete and fostering economic growth. The GDPR's flexibility to adapt to technological changes ensures it remains relevant, reducing regulatory uncertainty for businesses. This approach can inspire African countries to collaborate on creating standardised guidelines for startups and tech entrepreneurs, leveraging best practices to foster a secure and conducive environment for technological advancement.

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- **Establishing cross-border regulatory sandboxes:** Such regulatory sandboxes can provide a controlled environment for tech firms to test new products and services while regulators observe and refine regulatory approaches. This initiative supports innovation and helps create a supportive and adaptive regulatory environment.

  A notable example is the cooperation agreement between the Monetary Authority of Singapore (MAS) and India's International Financial Services Centres Authority (IFSCA). The MAS and IFSCA have established a regulatory sandbox to enable innovative cross-border experiments and explore new FinTech use cases in Singapore and India. This initiative allows for testing FinTech products, providing a launchpad for Indian FinTechs to expand into Singapore and vice versa. The collaboration also involves sharing information to facilitate discussions on emerging FinTech issues and promote joint innovation projects. By adopting similar frameworks, African countries can foster innovation, reduce regulatory barriers, and ensure regulatory measures that evolve with technological advancements, promoting sustainable economic growth.

- **Supporting capacity building and technical adoption:** This is critical for fostering an environment of creativity and innovation. Developing technology and innovation hubs can serve as centres for knowledge exchange and professional development, connecting talented individuals with industry leaders and investors, and creating ecosystems conducive to rapid adaptation and growth. These hubs help build the infrastructure and capabilities needed for digital advancements, contributing to sustainable economic growth. For example, the Co-Creation Hub (CcHUB) in Nigeria serves as a prime model of success. Since its inception, CcHUB has expanded its footprint to Rwanda, Namibia, and Kenya, demonstrating the scalability and impact of such initiatives. By fostering local talent and facilitating collaborations with industry leaders, CcHUB has significantly contributed to the digital transformation and economic growth in these regions.

  Public-private partnerships are instrumental in this endeavour, facilitating regular dialogue and engagement with industry stakeholders to ensure that regulations are practical, forward-looking, and supportive of innovation. Governments can introduce policy incentives to encourage private sector investment in technologies and capacity building for startups and tech firms. Partnerships with established technology companies provide access to the latest digital tools and training. These collaborations can include direct investments in educational programmes or infrastructure supporting digital learning, such as broadband connectivity and digital learning platforms.

  Technology adoption and capability building must go hand in hand to ensure effective implementation. Policies supporting industry-academia collaborations can ensure the workforce is equipped with the necessary digital skills to thrive in the modern economy. For example, Rwanda's National Skills Development and Employment Promotion Strategy offers tax incentives for companies that invest in employee training programmes. Similar initiatives can be implemented across Africa to stimulate academic and industry partnerships. These collaborations can lead to developing training programmes that align with market needs, enhancing the quality and relevance of education.

- **Leveraging diaspora expertise:** The African diaspora can be valuable in transferring knowledge and skills. Programmes that connect diaspora experts with local initiatives can facilitate the exchange of ideas and introduce global perspectives and best practices. This approach brings global expertise to local contexts, enhancing the region's ability to innovate and grow economically.

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The finance and technology sectors have immense potential for technological advancement and economic growth. However, regulatory fragmentation remains a significant barrier to realising this potential. By pursuing unified regulatory frameworks, stakeholders can create a more conducive environment for tech innovation, enabling companies to scale beyond borders and deliver transformative financial services globally. Such efforts will benefit the tech industry and contribute to broader economic development and financial inclusion for Africa.





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Conclusion

The roundtable highlighted the transformative potential for Africa's finance sector through strategic collaborations between industry, academic institutions, and governments. Insights from the session emphasised leveraging Africa's potential by aligning education with digital transformation demands, unifying regulatory frameworks to foster technological and business growth beyond borders, and transforming education for workforce readiness through academia-industry partnerships. These collaborations are crucial for driving innovation, promoting financial inclusion, and ensuring a skilled workforce that supports sustainable economic growth in Africa.

Forming a dedicated workgroup to follow up on key suggestions and collaborate with African governments or form an industry-academia alliance is essential. This workgroup would focus on implementing actionable items, enhancing strategies for reskilling and upskilling professionals to align with industry needs, and contributing to a more inclusive and diverse talent pool in the tech sector. By working together, we can realise the vision of Africa's digital renaissance, ensuring that the continent harnesses its full potential in the digital age.



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Disclaimer

The opinions expressed at a roundtable discussion during the 3i Africa Summit 2024 and quoted in this publication are those of the speakers. They do not purport to reflect the opinions or views of SMU Academy, Lagos Business School or Elevandi.

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