



Sector Intelligence Reports

Fintech and 4IRTech

March 2021



Western Cape
Government
FOR YOU

Economic Development
and Tourism



Introduction

Western Cape launched the DashTech programmes towards the end of 2020 to fulfil their mandate to deliver a world-class digital ecosystem and be recognised as Africa's Tech Capital. Specifically the Department of Economic Development and Travel (DEDAT) supported initiatives around five technology sector verticals, namely: Fintech, Safety-Tech, ScreenTech, TownshipTech and 4IR-Tech.

KPMG was appointed to support the Fintech and 4IR-Tech ecosystems. This report focusses on startups in these two sectors.

Section 1 evaluates each sector landscape, highlighting that South Africa has been identified as an emerging fintech hub in Africa by Startup Genome and that Fintech consists of various subsegments including Payments, Lending and Personal Financial Technology solutions.

4IR-Tech has been prioritised by the national government through the Presidential Commission for 4IR (PC4IR). These technologies are anticipated to be a significant contributor to economic growth following the general devastating impact of Covid 19 lock-up measures, attempting to stem the pandemic.

Based on historical investment information fintech is

the number one technology sector in SA.

4IR is not measured in a single element, but rather consists of various aspects like Robotics and Drones, Blockchain and DLT, Big Data etc. Similar to Fintech, it does not seem to be preferred by investors internationally, but is ranked higher in Africa and specifically South Africa relative to other sectors.

Section 2 looks at the challenges the tech sectors face and specifically how they were impacted by Covid 19. From studies locally and abroad it seems like Fintech and 4IR-Tech startups are generally better off compared to startups in other sectors. In fact research in the US indicates that Covid has strengthened the need for fintech as people are looking for digital, no-touch payment and financial management technologies to deliver on their money management needs.

Other challenges faced by startups in the 4IR-Tech and Fintech sectors include a need to provide input to developing new/ updating existing regulatory and legal requirements, the need for contact with peers to share learnings & resources, coordination of government initiatives to support start-ups, among others.

Section 3 refers to opportunities. Western Cape's strong sectors align well with the sectors mentioned to benefit most from 4IR-Tech, namely Agriculture, Energy and Water management.

Regarding Fintech, the Cape has already produced a number of ground-breaking technology solutions like "ThisIsMe" and "MamaMoney", so there is a strong foundation to build upon.

Both sectors can benefit from promotion, practical business support, additional and fair funding options as well as collaboration and dove-tailing of government's national, provincial and local programmes.

The last section provides some recommendations in

moving forward where it is clear that programmes like DashTech form a solid base to grow ecosystems as well as provide the necessary support to startup companies.

According to a 2016 report from the Kauffman Foundation, "high" growth firms make up just 15% of all companies but they contribute an estimate of 50% of total jobs created and are called transformational startups. Despite being small, they create ripples in the economy that change people's way of living.

May there be many transformational Fintech and 4IRTech startups launching in the Western Cape in the years to come.

End

This report refers to Fintech and 4IR-Tech ecosystems, and references are colour coded as follows:

Legend





Landscape Overview

- Parameters & value chain
- Sector context
- Regional position

A large, vertical, futuristic digital graphic is located on the left side of the slide. It features a central black circle containing the white number '1'. This circle is surrounded by a complex network of glowing blue and white lines, resembling a circuit board or data flow diagram. The lines radiate outwards and connect to various geometric shapes, including circles and rectangles, some of which are illuminated with a soft glow. The overall aesthetic is high-tech and modern.

Top 5 fintech ecosystems to watch (in alphabetical order) by region⁽¹⁾

For the Western Cape Project, Fintech included all financial service related technology solutions including Insurtech and Regtech. Some examples of problems being solved by technologies in this category includes: Payments, trading, wealth management, lending, credit scoring, financial inclusion, tax, market conduct, regulatory reporting, micro insurance, claims handling, Know-your customer solutions, among others.

South Africa's financial services sector is internationally recognised as one of the most sophisticated. In the last decade, this has been complemented by a small, but fast-growing fintech community.⁽²⁾ StartupGenome mentioned that Cape Town has a growing Fintech ecosystem⁽¹⁾



The Intergovernmental Fintech Working Group (IFWG) include the following as fintech.⁽¹⁾

Financial services segmentation							
Payments	Lending	Savings & Deposits	Insurtech	Investments	Financial planning & Advisory	Capital raising	B2B Tech providers
mPOS (acquirers)	Online (alternative) lenders ¹	Digital community savings	Connected insurance ⁴	Retail trading	Robo advisory	Crowd investing	Aggregators ⁶
Crypto payments	Asset financing	Savings products	Peer-to-peer insurance ⁵	Crypto currency trading	Personal finance management	Due diligence ³	Open infra structure
Cross-border payments	Alternative scoring	Layby ²	Automated risk analysis	Alternative exchange	Small business finance management		RegTech & risk management
Closed loop mobile wallets	Lending market places	Digital banking (issuers)	Digital distribution				Data applications
(Bill) Payments aggregators			Claims management				Security & ID
3 rd party payment providers							Process automation
							White label platforms (solutions)

In South Africa, the Intergovernmental Fintech Working Group members include the Competition Commission (CC), the Financial Intelligence Centre (FIC), the Financial Sector Conduct Authority (FSCA), the National Credit Regulator (NCR), National Treasury (NT), the South African Revenue Service (SARS) and the South African Reserve Bank (SARB).

Formed in 2016, the working group is focused on promoting responsible innovation in the South African financial sector.

Overview of 4IR Landscape

Definition used in the 2021 Digital Innovation Challenge

The fourth industrial revolution (4IR) technology solution category includes technologies that use Artificial Intelligence (including machine learning), Big Data Analytics, Blockchain/ distributed ledger, Drones, 3D Printing, IoT, Robotics and Automation, among other. The solution could be relevant for more than one industry or tailor-made for a specific industry



Irrespective of the industry, 4IR tech can play a significant role throughout the value chain

Research and Development (R&D) –provides powerful knowledge and insights, leads to improvements to existing processes where efficiency can be increased, and costs reduced.

Procurement – connectivity to diversified procurement sources are expanded by more advanced information and communication technologies enabling to add predictability, flexibility, and adaptability to procurement.

Fabrication –3D printing and robotics are transforming manufacturing, to become less labour-intensive, more scalable, adaptable, and using new materials

Distribution – Automation has been an important driver to increase throughput and responsiveness in warehouses and terminals to improve gate, yard, and transloading operations. There is also potential for automated vehicles, and improved last mile and urban logistics.

Marketing –E-commerce has been an important driving force competing with and complementing standard retail systems and has favoured the growth of home deliveries.

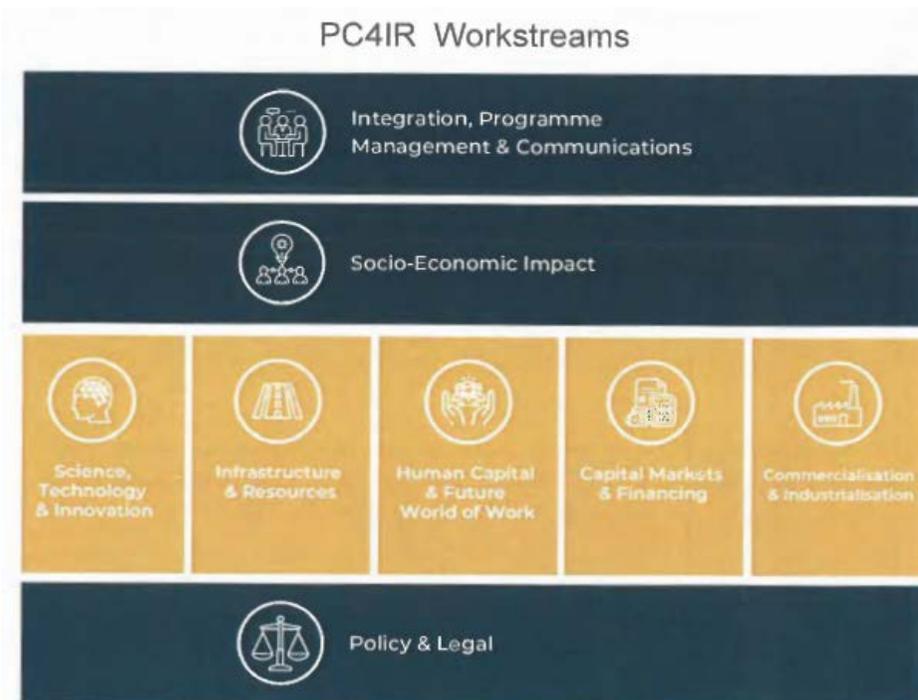
Services – service components have increased through IoT (Internet of Things) and the opportunity to use sensors and geolocation.

What is 4IR - Specific technologies included

- **Artificial intelligence:** Recognize complex patterns, process information, draw conclusions, and make recommendations, for example spotting patterns in huge piles of unstructured data or powering autocorrect on your phone.
- **Blockchain:** a secure, decentralized, and transparent way of recording and sharing data, with no need to rely on third-party intermediaries. The digital currency Bitcoin is the best known application, other applications include making supply chains traceable, securing sensitive medical data anonymously, and combating voter fraud.
- **Faster computer processing:** Quantum computing technologies will make computers millions of times more powerful to supercharge AI, create highly complex data models in seconds, and speed up the discovery of new materials.
- **Virtual / augmented reality:** Immersive digital experiences (using a VR headset) that simulate the real world, and augmented reality (AR) merges the digital and physical worlds for example an app where users can digitally experiment with makeup products before buying them, and the Google Translate phone app, which instantly translates street signs, menus, and other text.
- **Biotechnology:** Biotechnology harnesses cellular and biomolecular processes to develop new technologies and products for a range of uses, including developing new pharmaceuticals and materials, more efficient industrial manufacturing processes, and cleaner, more efficient energy sources.
- **Robotics:** the design, manufacture, and use of robots for personal and commercial use in fields as wide-ranging as manufacturing, health and safety, and human assistance.
- **The Internet of Things:** Everyday items — from medical wearables that monitor users' physical condition, to cars and tracking devices inserted into parcels — connected to the internet and identifiable by other devices..
- **3D printing:** manufacturing businesses print their own parts, with less tooling, at a lower cost, and faster than via traditional processes. Plus, designs can be customized to ensure a perfect fit.
- **And more** Innovative materials, including plastics, metal alloys, and biomaterials, promise to shake up sectors including manufacturing, renewable energy, construction, and healthcare.

The PC4IR believes that technology can help address the damage to the SA economy following Covid 19

The Presidential Commission on the Fourth Industrial Revolution (PC4IR), established and chaired by The President of South Africa, has been tasked with a comprehensive set of responsibilities under its Terms of Reference (TORs). These include proposing the country's overarching strategy for the Fourth Industrial Revolution as well as making recommendations regarding the institutional frameworks and roles of various sectors of society within the broad plan. This report was published in January 2020

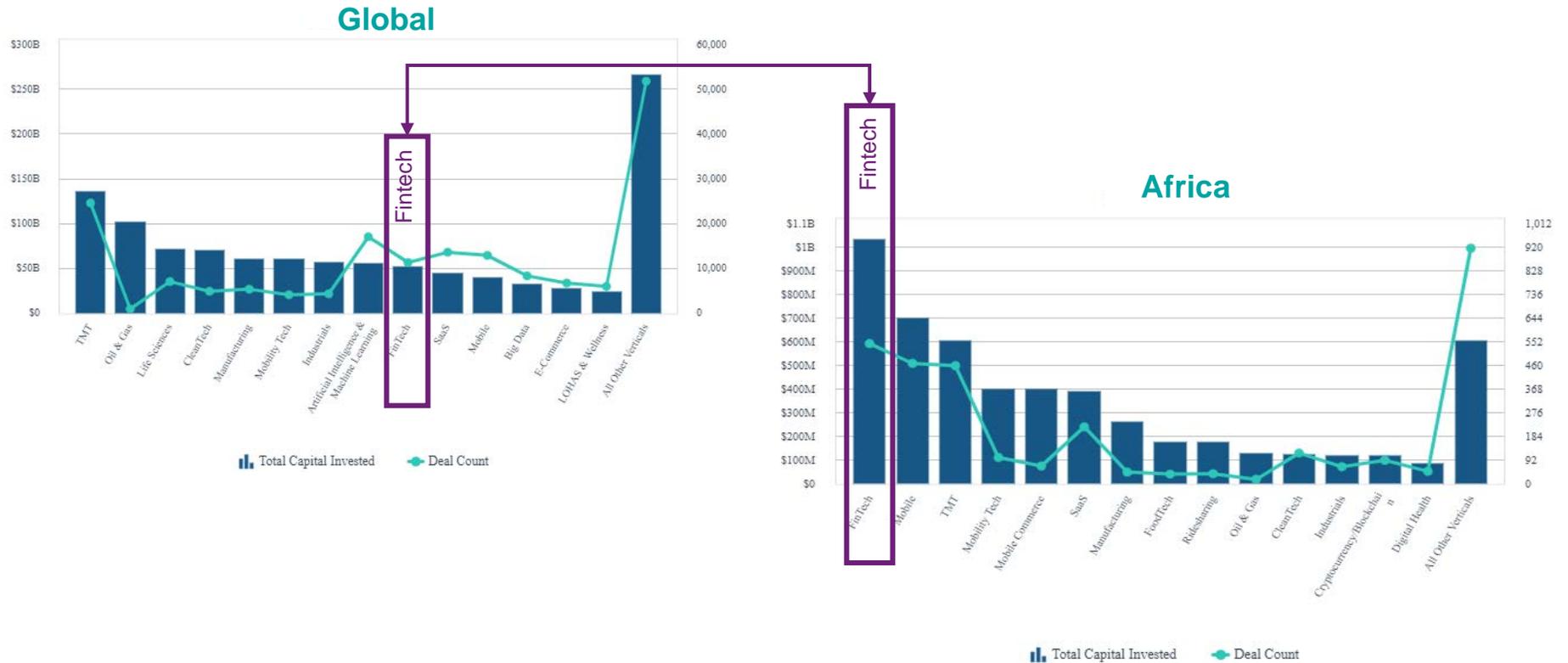


President Cyril Ramaphosa has urged that 4IR-Tech be placed at the centre of South Africa's economic recovery and help the country emerge from the damaging impact of the COVID-19 pandemic.

“South Africa must be a more technologically driven country that finds solutions that move us forward, with 4IR as a pivot for economic recovery,” said President Ramaphosa.

Investment in Fintech is proportionately more significant in Africa compared to global investments.

Using Investments in privately owned companies founded from 2016 as a proxy for relative importance of technology verticals. Globally Fintech is 9th in value, while the African landscape prioritises Fintech to number 1.



Global private companies founded from 2016 (last 5 years) All companies = 177871, Africa = 1314, South Africa, 440, Cape Town = 92

Fintech 4IR Tech Both Other



South Africa also has Fintech as Number 1 and prioritises 4IR tech compared to Africa



Companies to watch include:

 Flutterwave Total Raised \$229.36M Last Deal Type Series C	 SaltPay Total Raised \$149.63M Last Deal Type Early Stage VC	 Medici (Communication) Total Raised \$78.57M Last Deal Type Angel
 Whiteside Capital Total Raised \$50.00M Last Deal Type Early Stage VC	 Planet42 Total Raised \$18.92M Last Deal Type Series A	 Adhara Total Raised \$15.00M Last Deal Type Early Stage VC

Fintech 4IR Tech Both Other

440 companies, 504 deals, 507 Investors

Global private companies founded from 2016 (last 5 years) All companies = 177871, Africa = 1314, South Africa, 440, Cape Town = 92



© 2021 KPMG Services Proprietary Limited, a South African company with registration number 1999/012876/07 and a member firm of the KPMG global organisation of independent member firms affiliated with KPMG International Limited, a private English company limited by guarantee. All rights reserved.

Source: Pitchbook as last accessed on 20 March 2021 with filters, founded after 2016, privately owned and relevant Geographic filter

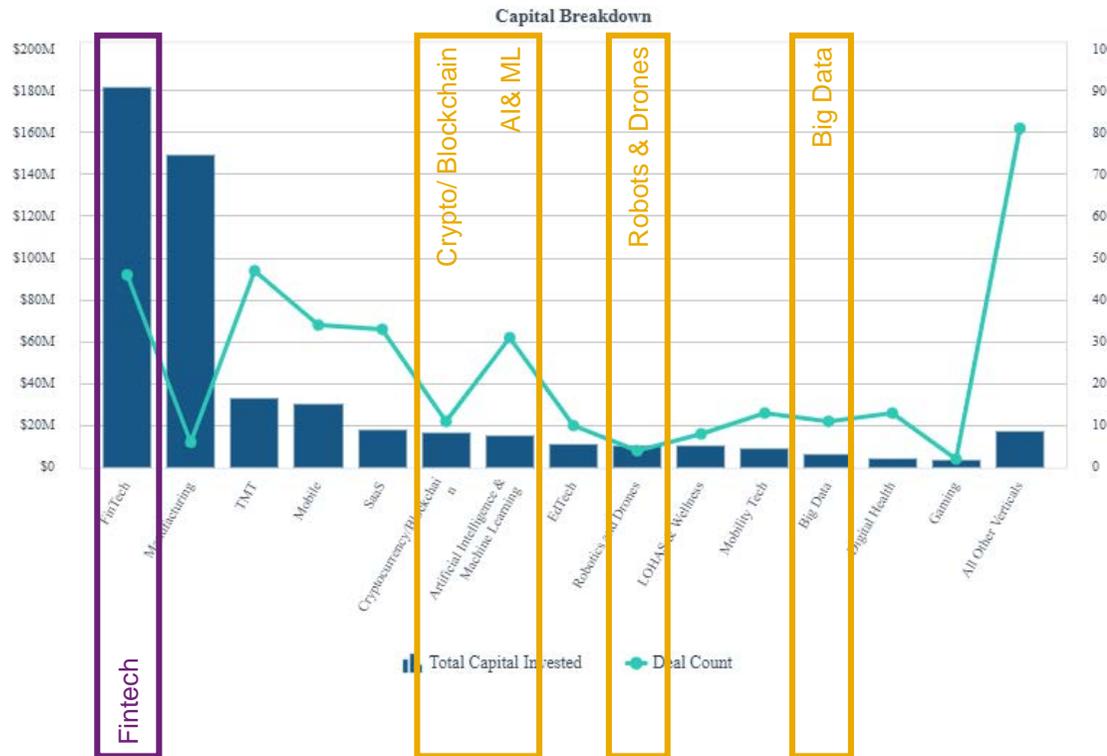
Cape Town Investment priorities reflect those of SA

Companies to watch

Merchants payment and management tools

Blockchain-based liquidity and international payments platform

Logistics services to connect isolated communities to the global supply chain with drone deliveries.



SaltPay
Total Raised \$149.63M
Last Deal Type Early Stage VC



Adhara
Total Raised \$15.00M
Last Deal Type Early Stage VC



Cloudline
Total Raised \$10.30M
Last Deal Type Seed



Smile Identity
Total Raised \$10.15M
Last Deal Type Series A



Vintro
Total Raised \$7.00M
Last Deal Type Series A



Valenture Institute
Total Raised \$7.00M
Last Deal Type Early Stage VC

Identity management platform

Video posting application

Global private online high school

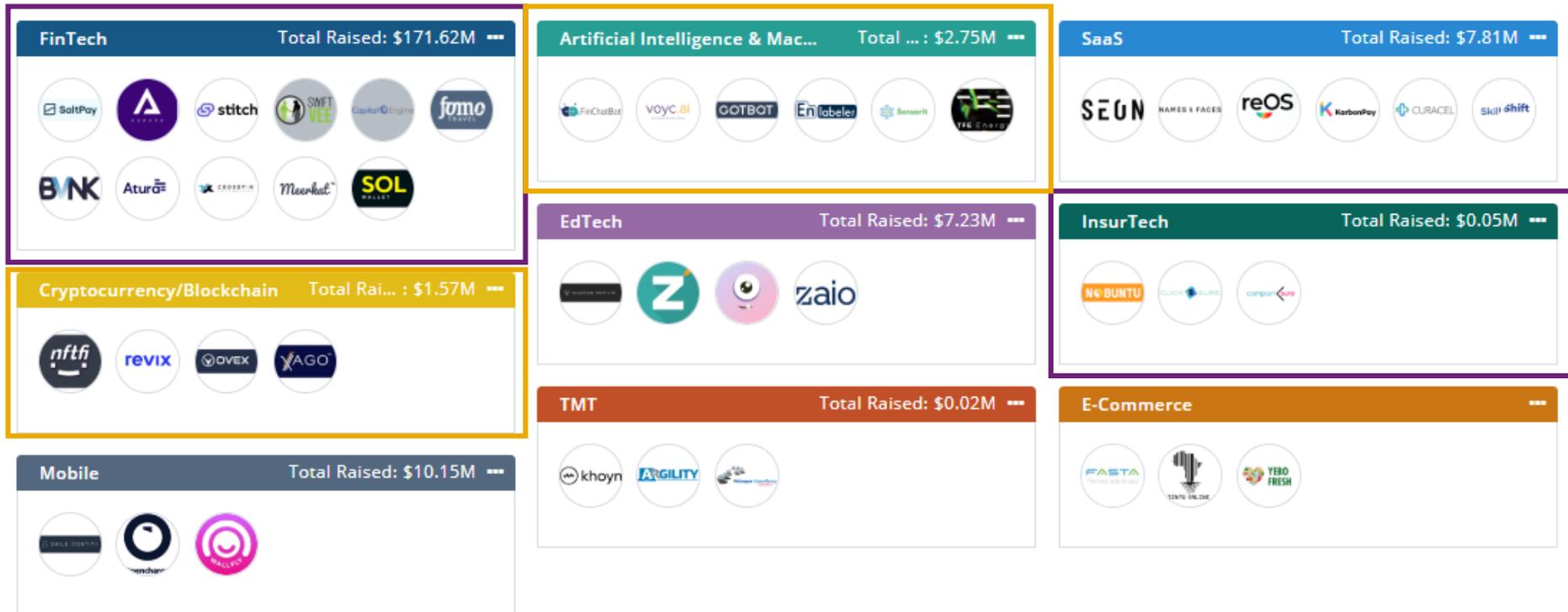
125 companies, 185 deals, 199 Investors

Global private companies founded from 2016 (last 5 years) All companies = 177871, Africa = 1314, South Africa, 440, Cape Town = 125

Fintech 4IR Tech Both Other



Some of the prominent Cape Town Technologies per segment



Fintech
4IR Tech
Both
Other



© 2021 KPMG Services Proprietary Limited, a South African company with registration number 1999/012876/07 and a member firm of the KPMG global organisation of independent member firms affiliated with KPMG International Limited, a private English company limited by guarantee. All rights reserved.



Challenges Faced

A complex, futuristic digital interface is shown on the left side of the page. It features a central circular element with a glowing blue and white color scheme. The interface is composed of various geometric shapes, lines, and symbols, including arrows, circles, and rectangular frames, all arranged in a symmetrical, vertical layout. The overall aesthetic is high-tech and modern.

2.

Issues Identified in Fintech interviews

In a study done for the IFWG, various Fintechs were interviewed to establish the challenges they face in South Africa.

Although the challenges were identified by Fintech, many of these challenges are equally applicable to 4IR-tech.

4IR-Tech is still emerging but due to its nature it is likely to lead to regulatory requirements, policies and new laws.

According to a Cognilytica report⁽²⁾ exploring the latest legal and regulatory actions taken by various countries around the world, most governments are adopting a “wait and see” approach to laws and regulations on AI.



Stringent compliance requirements

- Acquiring the correct licences to operate is costly and time consuming.
- Some legislation is outdated and needs to be revised in line with technological advances
- Regulation is complex and onerous, as overlaps in functionality require multiple licences for the same entity. It ranged from 3-6 months up to three years, to receive a licence.
- To increase speed to market some interviewees partnered with incumbents who already have licences, also avoiding expensive licencing fees and capital requirements.



Lack of contact with regulators

- It is difficult to access information about compliance requirements as there is no central, accessible info portal.
- Uncertainty about the prospects of the operating environment due to poor regulator engagement & a lack of policy clarity.
- Slow pace of formulating and communicating an official approach to/ regulatory requirements for fintechs.



Limited interaction with industry peers

- There is no central body for fintech entrepreneurs to network, share learnings and resources, validate business models, and formulate opinions on policy that can move the industry forward.
- Innovation hubs and accelerator programmes focus on training entrepreneurs and providing workspaces. They do not cater for needs like gaining access to markets, providing sufficient seed capital, and resources required to run a company (e.g. legal, compliance and HR shared services).

Issues Identified in Fintech interviews



Insufficient funding options for start-up capital

- The South African venture capital (VC) market is considered small, risk averse, and conservative compared to other markets.
- It is not generally understood that Fintech requires longer-term seed capital funding to grow/ start generating returns for investors.
- Many entrepreneurs funded the early stages of their business operations through private savings,



Challenges to reach sufficient scale

- The South African market is too small to reach sufficient scale and to make business sustainable. Many are looking to neighbouring African markets to grow their customer base.
- There are inadequate support structures available in the early stages of operations. There is a need for services such as legal, compliance and HR services among others.



High barriers to market entry

- Incumbents still have a significant share of the financial services sector due to factors such as holding the required licences and capital to develop tech solutions internally.
- The operating environment is seen as protectionist.
- Incumbents are not accustomed to partnering with fintechs and usually require exclusivity for up to five years or an equity stake. During the exclusivity period they replicate the technology internally and competitor institutions have time to catch-up, leaving fintech entrepreneurs with limited exit options.



Competition and role of incumbents

- Incumbents tend to price fintechs out of the market in order to retain customers as they can fund these discounts from retained earnings.

Globally 4IR-Tech faces regulatory challenges

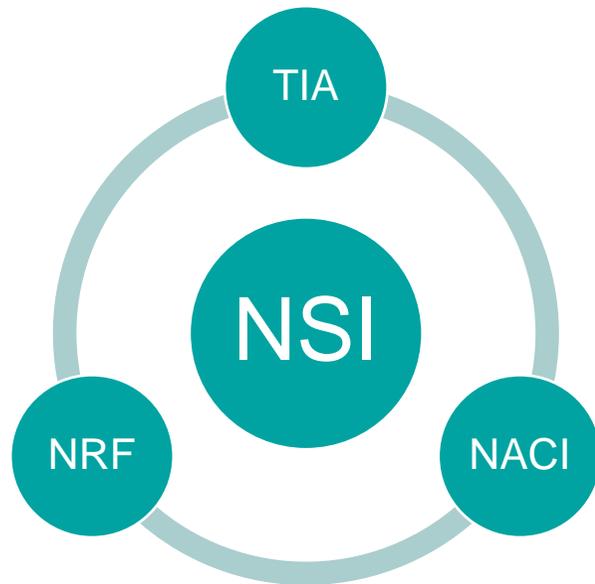
Some key challenges are:

- Closing the innovation chasm, where homegrown innovation is lost (not commercialised or lost to other markets),
- Combine and leverage 4IR technologies to solve societal, economic and development issues,
- Upgrade existing sectors and industries while creating new ones,
- Drive economic growth and trade for GDP growth and South Africa's prosperity.

Globally, efforts are under way to adopt policy and regulatory regimes to harness the 4IR to achieve national and international goals. The USA, the EU, China, and Russia, amongst many others, are accelerating policy and legislative reforms to harness technological change to meet national objectives. In South Africa, the process is under way, and the PC4IR plays a critical role: providing recommendations to guide the actions of both legislators and policy makers within government to implement a coherent national response.

The majority of 4IR technologies are still nascent. This means that our current task is not necessarily to deploy them but rather to participate in their development. This also allows the country to prepare itself for the deepening effects of the 4IR-Tech. This pertains specifically to the development of human capital; infrastructure, technologies and the entrepreneurial capacity to localise 4IR industries.

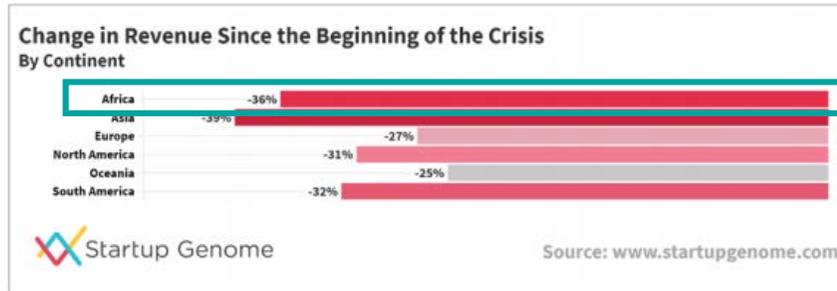
There are several government policies and initiatives to support the innovation ecosystem but they could be better coordinated.



- National System of Innovation (NSI): coordinates Innovation policies implemented in 1996. The NSI is supported by three key institutions:
 - the National Advisory Council on Innovation (NACI): the Council is appointed by the Minister for Science and Technology and guides the Minister and the Cabinet on the role and contribution of science, mathematics, innovation and technology, including locally produced technologies, in promoting and achieving national objectives.
 - Technology Innovation Agency (TIA) is a national public entity to bridge the innovation chasm between research and development. TIA's focus is on technology development, from proof of concept to the pre-commercialisation.
 - National Research Foundation (NRF) is an independent statutory body established through the National Research Foundation Act and functions as a research funding agency

- There are other various other National, Provincial and Local governmental innovation and startup initiatives with some sector specific.
- The NSI can improve its offering through better coordination across government departments to avoid fragmented, dislocated and inefficient efforts.
- The National Treasury has been trying to develop South Africa into a financial centre for Africa to improve inward investment flows, boost employment creation, improve financial revenue and support economic growth. The strategy includes making South Africa a fintech or innovation hub for the region. Treasury aims to introduce recommendations on making the South African financial sector conducive to fintechs scaling regionally, and improving local access to funding.

So far, the net effect of Covid has been negative on all sectors, also for global startups



Overall, African Startups were second hardest hit in terms of change in revenue due to the Covid crises

Subsector	Revenue change
Blockchain/ Crypto	-14%
EdTech	-24
Fintech	-29%
AI/ Big Data	-30%
Smart City	-37%
Agritech & New Food	-39%
CleanTech/ Energy & environment	-39%
Advanced Manufacturing	-48%
Travel & Tourism	-70%

The nature of a sector and what it needs to operate could provide some “protection” against the negative effects of Covid. It is not possible to exactly categorise Startup Genome results in terms of the two sectors covered in this report, however the highlighted areas are indicative and shows International estimates of revenue changes.

SA study confirmed that relatively fewer Fintech and 4IR-Tech closed down compared to other SA SMEs, due to Covid.

Again it is not possible to exactly categorise FinFind results in terms of the two sectors covered in this report, so the highlights are indicative.

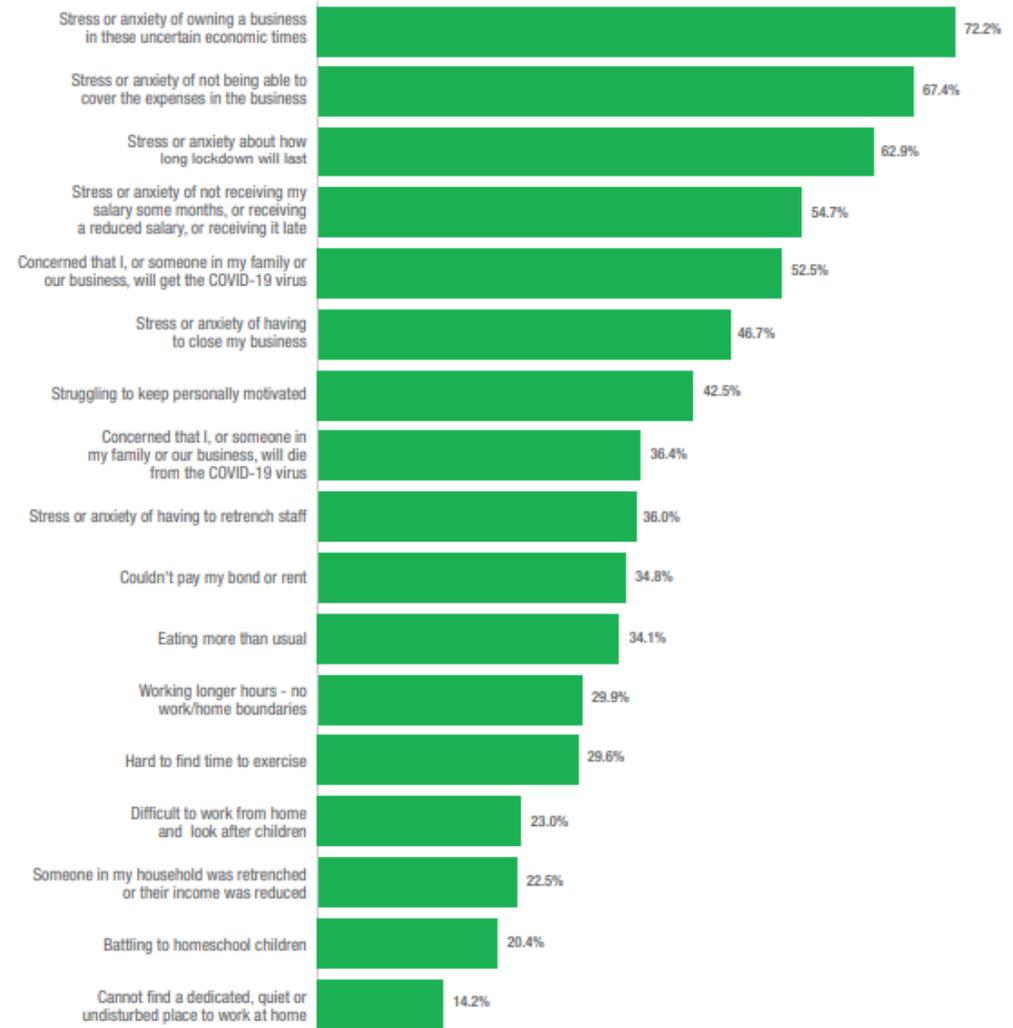
COMPARISON BETWEEN BUSINESSES THAT REMAINED OPEN AND THOSE THAT CLOSED DURING LOCKDOWN



The top 5 challenge experienced by SA companies who remained open during Covid are all stress related

Businesses who managed to keep operating despite Covid, suffered from stress relating to their ability to manage and maintain their business during lockdown

CHALLENGES EXPERIENCED BY THE OWNERS OF BUSINESSES THAT REMAINED OPEN



The top six responses show that stress and anxiety are the biggest challenges facing the owners.

Note: Participants were able to select multiple answers and hence the totals exceed 100%.



Summary of Challenge facing Fintech and 4IR-Tech

Despite being at different levels of maturity, Challenges Fintech and 4IR-Tech face similar challenges in South Africa.

1. Regulatory requirements

- Tech providers should have a voice drafting new industry rules.
- Much of the 4IR policies and legislation need to be drafted as the technologies & value propositions emerge.
- Existing legislation might be outdated & not accommodate more modern requirements.

2. Lack of contact with peers

- No central body for entrepreneurs per sector to network, share learnings and resources, validate business models, and formulate opinions on policy to move the industry forward.

3. Funding requirements

- South African VC market is considered small, risk averse, and conservative compared to other markets.
- Industries differ and startups require funding agreements aligned to the sector's rhythm
- Many entrepreneurs do not have the ability to fund their own early stages development.

4. Promote collaboration between tech providers and corporates

- Corporates are not used to working with Tech start-ups leading to lost commercial opportunities as a result of various practices like stringent exclusivity requirements, unfriendly payment agreements etc.
- In addition, the local SA economy is not large enough.

5. Coordination of government initiatives

- There are various government initiatives with sizeable funding however a lack of coordination can lead to duplication and delivering unsuitable support.

6. Business support required to reach scale

- Typical support does not include practical business support like gaining access to markets, providing sufficient seed capital, and resources required to run a company (e.g. legal, compliance and HR shared services).



A complex, futuristic digital graphic is centered on the left side of the image. It features a central black circle containing the white number '3.'. This circle is surrounded by multiple layers of glowing blue and white lines, resembling a circuit board or a data visualization. The lines form concentric circles, radial paths, and various geometric shapes like triangles and squares. Some lines are solid, while others are dotted or have small circles at their ends, giving it a sense of depth and movement. The overall aesthetic is high-tech and digital.

3.

Opportunities

Opportunities predicted

The IFWG analysed different segments within the Fintech sector to identify where the greatest growth opportunities lie.

	Payments	Lending	Savings and deposits	InsurTech	Investments	Financial planning & Advisory	Capital Raising
Projection	The Payment fintech segment is likely to grow above the market annual growth rate of 4% from 2017 to 2025.	Lending fintech segment is likely to grow above the market annual growth rate of 3% from 2017 to 2025.	Savings & Deposit fintech segment is likely to grow above the market annual growth rate of 7% in the first few years, however, by 2025 this trend should slow down.	The insurtech market will continue to grow moderately ahead of the traditional insurance market over the forecast period.	The investment fintech market is expected to grow slower than market .	Fintechs are expected to grow in line with the market .	Growth in Crowd investing is expected to be flat, possibly growing lower than the market .
Growth factors	Global regulatory trends are opening up the payments space by requiring banks to share data with fintechs. It is reasonable to assume these trends will filter into the South African market. Consumers will increasingly prefer the convenience of digital payments.	Growth is likely to be driven by high consumer demand as these fintechs resonate with previously underserved consumer segments not being catered for by formal financial services providers.	Digital channels, new product features, 24/7 access to providers and innovative value propositions (such as instant account opening) will encourage customer adoption of new entrants.	Niche or tailored risk and pricing models will likely drive the growth of this segment, as products will be priced more competitively. Digital channels will make products more accessible and will improve customer experience on processes like claims.	Digital access and the removal of intermediaries will improve customer adoption by reducing fees and making investment products more accessible.	Robo-advice is being used to replace the high cost of personal advice. There is a wide range of business use for this type of technology ranging from retirement planning to portfolio selection.	Underserved MSMEs could be a valuable market for crowdfunding platforms as well as start-ups currently bootstrapping their business. There is also a market for investors looking for alternative investment channels, where small amounts can be invested at and higher returns.
Limiting factors	Given that payment innovation is taking place on existing payment rails and banks remain major players in the payment innovation space, the main challenge for payment would be competition with incumbents. Partnership with banks will be important for the growth of the sector.	High levels of indebtedness amongst low-income citizens in South Africa has led to Parliament's consideration of a legislative drive to write off debt of overburdened consumers. Amendments to the NCA will make the lending processes more difficult which could hamper growth.	Traditional banks dominate this highly regulated space. New players, which will launch during 2019 and 2020, will disrupt the market. However the high regulatory requirements remain the biggest constraint. Consumers also tend to trust a recognised brand with their money. Incumbents with multiple product offerings have the advantage of cross-selling and bundling products .	Traditional insurers have a higher client and asset base. As a result, they are able to use this position to price competitively. Sustainability of fintechs underwriting low value assets is the biggest risk for growth in this sector.	Investment products are regarded as a secondary financial need. Difficult economic conditions, and a poor savings and investment culture, will make this a challenging area to grow. In addition, consumers have high trust in incumbent FSPs when thinking about investing long term.	The biggest constraint is regulation , as financial services providing advice through an electronic medium that uses algorithms and technology without the direct involvement of a natural person must comply with additional operational ability requirements.	With no specific regulation for crowding funding, these business are required to comply with numerous regulations (e.g. Financial Markets Act, FAIS, NCA etc) that were developed for traditional investment firms or FSPs.

Factors such as funding, market readiness and innovative incentives to develop the innovation ecosystem have implication for all segments.

Source:

[http://www.treasury.gov.za/comm_media/press/2020/WB081_Fintech%20Scoping%20in%20SA_20191127_final%20\(002\).pdf](http://www.treasury.gov.za/comm_media/press/2020/WB081_Fintech%20Scoping%20in%20SA_20191127_final%20(002).pdf)



© 2021 KPMG Services Proprietary Limited, a South African company with registration number 1999/012876/07 and a member firm of the KPMG global organisation of independent member firms affiliated with KPMG International Limited, a private English company limited by guarantee. All rights reserved.

Fintech segments with the highest potential impact

	Payments segment	Lending segment	Deposits & Savings Segment	Insurtech segment	Investment segment	Financial planning & advisory	Capital Raising	B2B Tech providers
Scalability	● 4	● 3	● 2	● 2	● 1	● 2	● 1	● 4
	Basic financial services that can be easily integrated with channels outside of banking e.g. social media	High customer demand, with new credit scoring models to include previously excluded clients	Success of Capitec demonstrates that there is a market for lower fees, simple products and better interest rates	Image processing tools and digital platforms for sales and claims processing make insurance more accessible	Secondary financial product for middle income consumers	Providing financial advice for the mass market which is otherwise unable to access traditional channels	The incumbent exchange (JSE) is likely to maintain market share but new exchanges may attract smaller investors	Large market for tech solutions to support incumbent financial institutions or other fintechs as white label solutions
Improve quality of financial services	● 4	● 4	● 2	● 2	● 2	● 3	● 2	● 3
	Making payments more efficient (real-time), improving the cost of remittances, and reducing the reliance on cash	Seamless credit application process with short loan application turnaround time	Innovative products and CVPs are incentivising savings behaviour	Improving risk management models by allowing consumers to tailor their risk exposures	Simple and easy to understand system will help inexperienced investors navigate the sector	Provides information on product availability and suitability to the consumer's portfolio	Competition improves trading and settlement fees and offers investors more choice	Building solutions that that improve security, automaton and customer experience
Improves financial well-being	● 1	● 1	● 3	● 2	● 2	● 3	● 1	N/A
	Processing payments at lower costs Digital payments are safer than cash transactions	Responsible lending provides liquidity for SMEs and individuals to cover economic shocks	Access to savings provides liquidity for unforeseen circumstances	Allowing consumers to protect against potential financial loss at low premiums	Allows consumers to realise long term savings goals and improve wealth	Providing financial information at low cost, improving consumers' financial decisions	Access to investment opportunities will encourage more investors to participate but there are investment risks	
Economic development	● 2	● 3	● 3	● 1	● 2	● 2	● 3	● 1
	Digitises cash in the economy	Access to credit is a fundamental part of growing the economy	Higher savings rates have a positive impact on economic growth	Helps MSMEs and individuals mitigate risk	Higher savings and investments improve economic growth	Encourages long term savings which has a positive impact on the economy	Allows smaller companies / MSMEs to benefit from access to equity capital	Facilitates innovative financial solutions
Risk factors	● -2	● -3	● -3	● -2	● -2	● -2	● -2	● -2
	Customer preference for cash Competition with traditional banks who are digitising payments	Increasing regulation will make it difficult to grow this sector Poor economic conditions could increase non-performing loans	Dominance of incumbents with stringent regulation may deter segment growth Historical low savings rates could impede growth	Uncertainty around sustainability of covering low-value assets	SA's low financial literacy and savings rate makes investment less viable	Consumers prefer face to face advice for more complex financial decisions Design and testing of algorithms for accuracy must be monitored	Uniform regulation that applies to all platforms will limit the number of crowdfunding platforms	Partnership models – many incumbents prefer to buy a stake in fintech B2B business or limit them to an exclusivity arrangement
Overall impact	9	8	7	5	5	8	5	6

The scoring criteria are defined as:

- **Scalability:** Will fintech business models succeed, grow, attract customers, improve efficiency, and be sustainable.
- **Improves quality of financial services:** Evaluates the extent to which the innovation brings new products and services to market with greater efficiency.
- **Improves financial well-being:** How do fintechs help consumers make better financial decisions, including providing services at a low cost.
- **Economic development:** How will the development of the fintech segment contribute to the economy.
- **Risk factors:** Level of potential risks that may deter the progress of each segment.

er firm of the KPMG global organisation of independent member firms arantee. All rights reserved.

Source:

[http://www.treasury.gov.za/comm_media/press/2020/WB081_Fintech%20Segments%20in%20SA%2017_final%20\(002\).pdf](http://www.treasury.gov.za/comm_media/press/2020/WB081_Fintech%20Segments%20in%20SA%2017_final%20(002).pdf)

Fintech Opportunities

The IFWG report referred to on the previous 2 pages was published in November 2019, a few months before the world became aware of Covid-19.

The pandemic's force in driving companies and customers to digital interaction has seemingly impacted positively on Fintech. According to one survey published by the US payments company Plaid:

- 69% of Americans found fintech to be a lifeline during COVID-19. More than half say they could not have kept up with their finances during COVID-19 if not for digital apps, products and services.
- 73% of Americans felt that after COVID-19, using fintech to manage money will be the new normal.

Similar impact is anticipated in the local market and it confirms what the IFWG predicted towards the end of 2019 Fintechs touching on Payments, Lending and Personal Financial Management solutions are set to grow and make the largest impact.

According to the Startup Genome's 2020 Fintech report, the pandemic has also accelerated trends that enable Fintech to grow in the medium and long term, particularly through the expansion of e-commerce, cybersecurity and wide-scale changes in consumer behaviour .

Source: (1) <https://plaid.com/documents/the-fintech-effect-2020-consumer-report.pdf>

(2) <https://startupgenome.com/reports/global-fintech-ecosystem-report-2020>



© 2021 KPMG Services Proprietary Limited, a South African company with registration number 1999/012876/07 and a member firm of the KPMG global organisation of independent member firms affiliated with KPMG International Limited, a private English company limited by guarantee. All rights reserved.

According to the PC4IR, these emerging technologies can address Key SA challenges



Energy generation, storage, and transmission can become smarter, more efficient, and more transparent. 4IR enables Smarter energy supply planning and demand management, Smart energy storage the transition to virtually controlled / managed power plants, 3D printing of energy infrastructure components

Biotechnology combined with informatics & precision data improves seed and plant resilience to enhance food security. Experiments with smart and precision farming include the use of drones for mapping and data gathering in the wine industry, automated, energy efficient water monitoring sensors support precise water use for irrigation, among others.



Smart water meters can provide real-time, detailed water use to drive responsible domestic and industrial water use, smart water, sanitation, and hygiene solutions also become health and disease monitoring tools

Automation and the use of robots can be deployed for deeper level mineral extraction; Digital rockface mapping (through improved kinematic analysis and advanced 3D virtual isonet analysis) can assist with more precise determination of the mineral content of rocks and their relative stability- or lack thereof - to justify precision drilling and extraction.



Telemedicine can connect health practitioners with those in need of care Predictive health analytics, enabled by Big Data and digitised health information systems, assist with mapping and predicting health services demand, empowering both private and public healthcare providers to plan accordingly.



It is expected that by 2026, 4IR-Tech could unlock around R1.4 trillion of value in South Africa across agriculture, infrastructure, manufacturing, and financial services.⁽²⁾

Source:
(1) https://www.gov.za/sites/default/files/gcis_document/202010/43834gen591.pdf
(2) <https://ctutrainig.ac.za/is-south-africa-prepared-for-the-4th-industrial-revolution-2/>

PC4IR identified a number of opportunities to optimise and grow the 4IR-tech industry

Invest in Human Capital for industry aligned upskill, reskill and lifelong learning

Establish an AI institute with a mandate to do research & development + training

Establish a platform for advanced manufacturing and new materials

Secure and avail citizen and other mass data to enable innovation and productive exchange

Incentivise future industries, platforms and application of 4IR technologies through subsidies and tax incentives

Build & incorporate 4IR infrastructure into all planning and infrastructure implementation

Create/ review and amend Policy and Legislation to ensure a conducive environment

Establish 4IR strategy implementation & coordination council to coordinate initiatives across private and public sectors, labour, academia and SMMEs

Summary of Fintech and 4IR-Tech opportunities

Support for most relevant sector development

Western Cape has significant capability in Agri -, energy - and water sectors where a lot of 4IR-tech impact is expected. How can provincial government support the local ecosystem development more actively



Support for PC4IR

How can Western Cape support and expand upon the opportunities and activities identified by the commission.



Promote Fintech

Knowing that the demand for Fintech has and will continue to grow in a post Covid world, how can we support & promote the relevant CT based Fintechs?

Fintech

Corporate fintech relationships

How can we facilitate and support strengthening corporate and fintech relationships

A complex, futuristic digital graphic is centered on the left side of the page. It features a large, glowing number '4.' in the center, surrounded by intricate circuitry, glowing lines, and circular patterns. The overall aesthetic is high-tech and digital, with a color palette of teal and white on a dark background.

4.

Recommendations

Cape Town is one of the highest ranking African cities on the list of emerging global ecosystems

Cape Town is already well positioned as the Tech Capital in Africa and needs to merely build upon supportive initiatives like the Dash-tech projects

City	Rank	Performance	Funding	Market Reach	Talent
Mumbai	1	10	10	10	10
Jakarta	2	10	10	10	9
Zurich	3	9	10	10	8
Greater Helsinki	4	8	10	10	9
Guangzhou	5	10	9	4	10
Cairo	51 - 60	3	7	1	7
Cape Town	51 - 60	3	4	8	6
Lagos	61 - 70	4	7	1	1
Nairobi	61 - 70	2	6	1	5

Startup Genome's mission is to accelerate startup success and ecosystem performance everywhere, working together with global thought leaders to define and execute robust policies and programs that drive lasting change. Their impact is rooted in over a decade of independent research with data on over a million companies across 150 cities. The outcome is 2 ranked lists: the Top 30 Global Ecosystems and Runners-up lists, and the top 100 Emerging Global Ecosystems.

Suggestions to strengthen Fintech and 4IR-Tech in the Western Cape

Promote Technologies

Western Cape has a vested interest in actively supporting and promoting startup technologies to all the Corporates based within their geography. The promotions could take various forms including regular challenges, identifying the top technology annually to demo sessions and online profiles to showcase the potential impact the solutions offer.

Peer Contact to stimulate growth and drive policies and legislation

Use programs like DashTech as a platform for sector entrepreneurs to network, share learnings & resources, validate business models and formulate and share opinions on policy and legislation

Peer Optimise Government initiatives

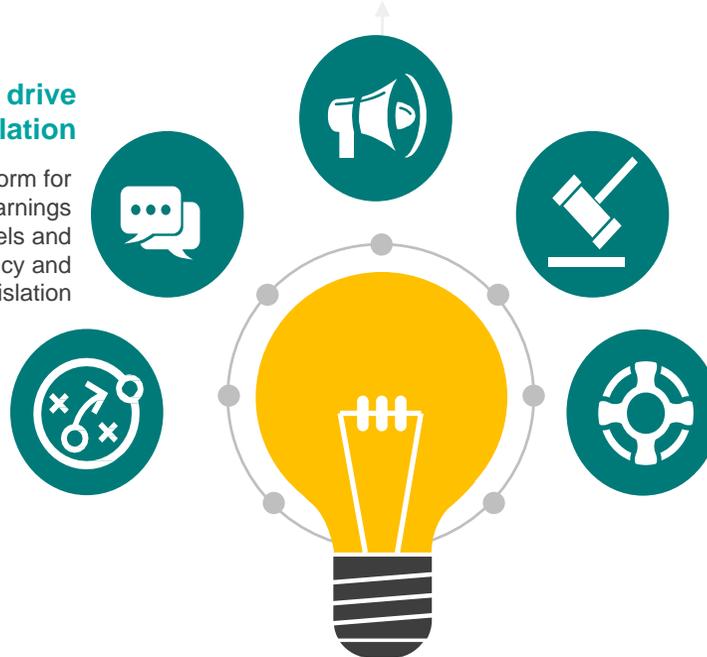
Connect Western Cape provincial initiatives to national (e.g. PC4IR, TIA, IFWG etc.) and local government initiatives to maximize impact

Regulatory requirements

Solicit inputs from Tech firms to draft new and update existing Provincial and national policies and legislation.

Business Support

Create ways where existing public works programs/ unemployment initiatives can be optimized to deliver core business support to startups





Thank you



KPMG Matchi's Targeted Emerging Technology Sourcing



KPMG Matchi is an emerging technology and innovation matchmaking platform and a service that we provide to clients. We connect financial institutions and other large corporations with leading-edge technology solutions and solution providers worldwide.

Navigating the technology universe

Emerging technologies are proving to be a key differentiator to increase efficiencies, lower costs and enhance the customer experience.

Innovative companies realise that they can achieve these

Use cases KPMG Matchi can help clients with:

-  Sourcing relevant, high-quality solutions to PoC & implement
-  Open API optimization
-  Technology landscape review
-  New service and product development
-  Sensitizing top management (as a precursor for strategy development)
-  Showcase events
-  Innovation strategy

goals faster by connecting to startups with a single solution focus, rather than building solutions inhouse.

Because of the explosion of emerging technology start-ups in the past few years, it is more difficult to find the right ones for your needs.

Our product suite

-  **Innovation sourcing**
Rigorous and robust process – produces highly targeted shortlist
-  **White label platform**
Customise the platform to client needs
-  **Training**
Emerging technology trends/landscape overview
-  **Portal Access**
RegTech – regulatory innovations
SecureTech – cybersecurity database

Our value proposition

KPMG Matchi helps clients to “cut through the clutter” and find solutions that are global best-in-class and best fit for client needs while delivering this faster and cheaper.

We have a proven methodology, complemented by a curated database of technology start-ups and an extensive global network of solution providers.

Our solutions

6500 Solutions 

Categorized by:

23 Fintech themes 9 Regtech themes 14 Mobility themes 13 SecureTech themes

 52 countries





Contact us



Shamit Govind

Partner, RC: Emerging Tech
shamit.govind@kpmg.co.za
+27 827191389



Freda Gray

Senior Manager: KPMG Matchi
Freda.gray@matchi.biz
+27 60 99 77 175

Disclaimer:

The Matchi platform and related services are not permitted for SEC clients or affiliates. In addition, some or all of the services described herein may not be permissible for non-SEC audit clients and their affiliates or related entities.



kpmg.com/socialmedia



kpmg.com/app

The information contained herein is of a general nature and is not intended to address the circumstances of any particular individual or entity. Although we endeavor to provide accurate and timely information, there can be no guarantee that such information is accurate as of the date it is received or that it will continue to be accurate in the future. No one should act on such information without appropriate professional advice after a thorough examination of the particular situation.

© 2021 KPMG Services Proprietary Limited, a South African company with registration number 1999/012876/07 and a member firm of the KPMG global organisation of independent member firms affiliated with KPMG International Limited, a private English company limited by guarantee. All rights reserved.

The KPMG name and logo are registered trademarks or trademarks of KPMG International.