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Brief Overview: The State of Tech Hubs in South Africa

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BRIEF OVERVIEW:
THE STATE OF TECH HUBS IN SOUTH AFRICA

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INTRODUCTION: DIGITAL INNOVATION IN TECH HUBS

The digitisation of data and the availability of Internet and mobile communications has created digital technology advancements in all sectors and industries. Digital innovation centres and technology hubs (tech hubs) evolved (i) as a way of making available broadband access to innovator-entrepreneurs, fostering creativity and providing supporting environments to technology startup companies (startups), or (ii) as a space for communities of entrepreneurs, who became interested in the benefits to be gained from using digital technologies.

Digital innovation hubs can be seen as 'ecosystems' or communities that consist of researchers and software developers, digital makers, startups, SME's, as well as corporate clients and investors in innovation, with the "aim to create the best conditions for long-term business success for all involved" (Zwegers & Sassen, 2015). Digital innovation hubs are, generally, collaborative working spaces, and may include incubator and accelerator facilities. Digital tech hubs focus on the ICT production and service sectors, as well as on digital technologies as enablers in all industries and sectors, for example, the design of ICT applications for the aviation sector, the education sector, the energy sector, the fashion, health, retail and other sectors. In 2017, most tech hubs have a digital presence, either as a dominant characteristic, or as a supporting characteristic.

The common features across these digital tech hubs is that they are collaborative working spaces and competence building centres, using digital technology to create business startups, or to improve and grow existing businesses. While broadband Internet access is relatively low on the continent, the rapid growth in Wi-Fi hotspots, smart phones and laptop devices has advanced Internet penetration and access, creating demand for digital applications (apps), software platforms, 3D printing, data analytics and solutions ranging from e-health to smart homes and smart cities. Tech hubs have become spaces where many young aspiring entrepreneurs can access resources such as Wi-Fi, office and meeting space; receive training, coaching and mentorship; engage in networking and build partnerships; get assistance with startup and venture capital funding; and other inputs to apps development and technology advancement. Most tech hubs in South Africa and on the African continent provide an arena for learning and practicing software development and related skills, as well as business and management skills required for a particular country to participate in the global game of digital innovation. In some tech hubs, the emphasis may be on local investment in other fields of technology advancement, but digital innovation is generally present in the technology and entrepreneurial mix. Among the benefits of tech hubs and business incubators, is the process of value creation for profit and not-for-profit enterprises; advancing the competitiveness of business in the markets in which they operate.

The statement below reflects the emerging state of tech hubs on the African continent. Huwart (2015) of Global Enterprise referred to Africa as 'a new born world economy'. The following 'facts and figures' are from his *Coworking in Africa* presentation in Cape Town 2015:

Co-working spaces and tech hubs are the two faces of the same.
According to the World Bank, there are 200 tech hubs operating in Africa.
South Africa is leading with about one third of the co-working and tech hubs.
More than half of the co-working spaces and tech hubs in South Africa are based in Cape Town.
Entrepreneurship level in South Africa is at the OECD average though there's a room for improvement everywhere in Africa.
Demography rising, infrastructure lacking, digital entrepreneurship increasing, in fact Africa has the fastest growing demography on the globe (Huwart, 2015).

This study, conducted for the LINK Centre under the auspices of the Open African Innovation Research (Open AIR) network,[1] identified 45 tech hubs and collaborative innovation and working spaces across four out of the nine South African provinces. The short overview below presents a synoptic view of the individual tech hubs, business incubators and co-working spaces.

OVERVIEW OF SELECTED TECH HUBS, TECH LABS AND CO-WORKING SPACES WITH A DIGITAL TECHNOLOGY ORIENTATION

SCOPE OF THE OVERVIEW

The scope of this study is limited to tech hubs, incubators or co-working spaces where digital innovation is the focus, or where digital technologies are used as an enabler to productive activity. There are a growing number of business centres and office spaces used on a shared basis. These are also commonly referred to as co-working spaces. An example is Regus, a shared office space available in most provinces. Government has also embarked on building science parks or centres, and digital learning centres in schools and communities. Only a few of these latter entities are included in the scope of this overview, with the main focus being on tech hubs.

SOUTH AFRICA BACKGROUND

The economy of South Africa's nine provinces, see Figure 1 below, has Gauteng, KwaZulu-Natal and the Western Cape as the main provincial contributors to GDP, noting in particular the economic contribution of the eight metropolitan municipalities (Buffalo City, City of Cape Town, City of Johannesburg, City of Tshwane, Ekurhuleni, eThekwini, Mangaung and Nelson Mandela Bay). Presently, the majority of tech hubs are located in the City of Cape Town.

[1] https://openair.africa

Figure 1: Map of South Africa



Source: www.geology.com

The South African population mid-year estimate for 2016 was 55.91 million, more than a quarter of whom (26,5%) are unemployed (StatsSA, 2016). GDP was recorded at ZAR3.07tr (StatsSA 2017), with an average household income of ZAR18,104.00 in 2016 (Trading Economics, 2016). Public funding of research and development (R&D) was ZAR11bn in the 2013/2014 financial year, the latest survey year (NACI, 2016, p.10). The National ICT R&D and Innovation Strategy acknowledges that incubators and science/technology parks are key institutions for innovation and aims to 'support ICT startups to create a vibrant hi-tech ICT SMME sector' (RSA, 2007). However, Dlamini (2015) states that 'South Africa spends close to 10% of GDP on ICT goods and services, of which most are imported' and 'ICT R&D intensity as a % of GDP has decreased from 0.12% in 2009 to 0.065% in 2013'. While South Africa ranks 3rd in Africa in terms of regional IDI (ICT Development Index) behind Mauritius and The Seychelles, globally it ranks below its peers in the BRICS countries, with the exception of India (ITU, 2016, p.12). South Africa is ranked 88, while the Russian Federation is ranked 43, Brazil 63, China 81 and India 138.

The tech hubs discussed below are clustered in their respective provinces, with the exception of mLab, which operates in more than one province.

NATIONAL FOOTPRINT

1 MLAB SOUTHERN AFRICA[2]

mLab Southern Africa officially launched in 2012 and currently has four sites, three housed in incubators in Gauteng and one in the Western Cape: mLab Tshwane and CodeTribe Tshwane, both located at the Innovation Hub; one located in the Soweto Empowerment Zone and mLab Cape Town located in Workshop 7 at the V&A Waterfront. mLab Southern Africa was launched as a mobile technology accelerator focused on unlocking the 'app economy' and has grown to support skills development. The mobile laboratories offer work spaces, events, workshops and training for startups

[2] All information and short quotations are obtained from the entities' websites.

and small businesses. The mlabs have support from the Department of Science and Technology, World Bank InfoDev, The Innovation Hub, The V&A Waterfront and the Ministry of Foreign Affairs of Finland. Startups operating from the mLabs include pinkdrive App, Appchemy, Aftarobot, hearScreen, visceral Podcast, and Afroes, amongst others. For more information go to www.mlab.co.za

WESTERN CAPE INNOVATION HUBS/CENTRES

Below is a map of the Western Cape Province, where the majority of the tech hubs are located.

Figure 2: Map of the Western Cape Province



Source: www.cape-venues.co.za

We identified 25 tech hub and collaborative working sites in the Western Cape (mainly Cape Town-based), including Angelhub www.angelventures.com; Codebridge www.codebridge.org.za; Code X www.projectcodex.co.za; Daddy O www.daddyo.co.za; Entrepreneur Incubator and Academy http://spice4life.co.za/champions-of-change/organisations_making_a_difference/entrepreneur-incubator-academy/; Growth Space www.growthspace.biz; Impact Amplifier www.impactamplifier.co.za; MTN Solution Space http://www.gsb.uct.ac.za/s.asp?p=518; New Ventures Studio www.newventuresstudio.co.za; Platform9 www.platform9.co.za; Seed Academy www.seedacademy.co.za; Silicon Cape Initiative www.siliconcape.com; Spin Street House www.spinstreet.co.za; Startup90 www.startup90.com; The Bureau www.the-bureau.co.za; The Grindstone Accelerator www.knifecap.com; Twenty Fifty www.desksurfing.net and www.ventureburn.com; Springlab www.springlab.co and Umbono.

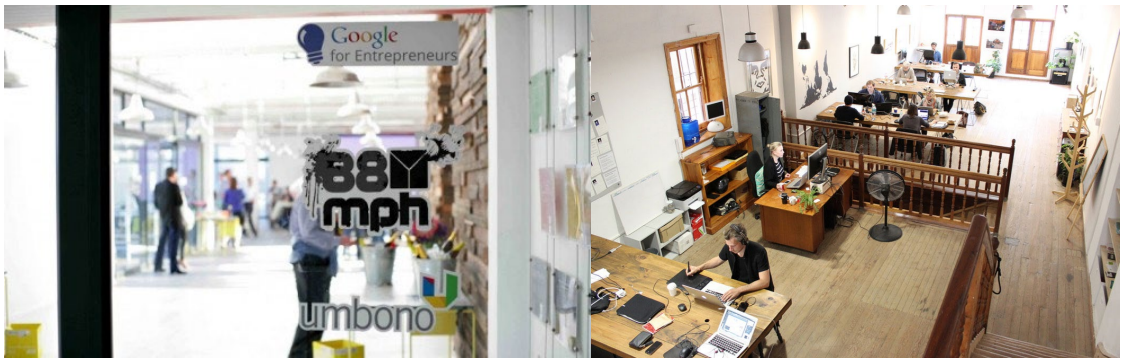
Thumbnail images of some of Western Cape based initiatives are presented below.

Figure 3: Images of Bandwidth Barn Khayelitsha, Cape Town



Sources: www.realestatemagazine.co.za and www.ccdi.org.za

Figure 4: Images of Cape Town Garage/88mph and Spin Street House



Sources: www.thenextweb.com and www.spinstreet.co.za

Figure 5: Images of Workshop 17, Waterfront, Cape Town



Source: www.ctymaps.com and www.workshop17.co.za

2 ANGELHUB

Angelhub Ventures, based in Stellenbosch, provide support to early stage businesses, ranging from strategic to operational assistance, including financial assistance, legal assistance and networking opportunities. Angelhub Ventures buys a minimum stake in the businesses it hosts, either as a start-up or business development investment. Some of the businesses are Amalocker, GoMetro and Snapplify.com. For more information go to www.angelventures.com

3 & 4 BANDWIDTH BARN KHAYELITSHA AND WOODSTOCK

The Bandwidth Barns are the work of the Cape Innovation and Technology Initiative (CiTi), located in the City of Cape Town, one site being The Barn Khayelitsha and the other being The Barn Woodstock. They both provide shared workspace, meeting rooms, networking opportunities, high speed Internet, printing services, training programmes for entrepreneurs in business skills, mentoring for entrepreneurs and startups, holiday programmes for school goers where they learn coding for mobile apps development and other skills. Also called Hubspace, they provide facilitation of access to capital, creating 'a synthesis of design, entrepreneurship and dedication'.

The focus for The Barn Khayelitsha is on 'tech and innovation as well as empowering women in business and youth tech', based on community engagement and consultation. For more information go to http://www.citi.org.za/the-barn-khayelitsha/

Startups and businesses operating at The Barn Woodstock include every1mobile, ITWeb, Dynatech, Innovate, Women in Engineering and Light Bulb Research. For more information, go to http://www.citi.org.za/the-barn-woodstock/

InnoTech is a Bandwidth Barn/CiTi initiative operating from the Woodstock Barn and supported by the Telkom Futuremakers funding programme. Its focus is on 'web and mobile applications development, software development and design, and gaming'. Amongst other services, it offers office space, high speed Internet, business training and access to funding via Telkom's enterprise development fund. For more information go to www.innotech.co.za

The Barn Woodstock is located at the Woodstock Exchange (WEX), a workshop for artists, fashion designers, musicians, photographers and other creative, an 'incubator for young fledgling businesses'. Though The Cape Town Garage and the Bandwidth Barn are resident at the Woodstock Exchange, they are separate incubators. Amongst others, the Woodstock Exchange hosts the following startups: Lady Bonin's Tea Emporium, One Horse Town, we are awesome blog etc. For more information go to www.woodstockexchange.co.za

The CiTi initiative has been in operation since 1998 and offers a variety of programmes to support startups and businesses, including a 'shared office ecosystem'; the capaCiTi programme provides technical skills development and placement', while the veloCiTi programme supports 'enterprise and entrepreneurs' development'. The CiTi partners and sponsors include Telkom, Western Cape Provincial Government, City of Cape Town metropolitan municipality, The Jobs Fund and the SETAs. For more information go to www.citi.org.za

5 CAPE TOWN GARAGE/88MPH

The Cape Town Garage/88mph provides working space for mobile web startups, high speed Internet, mentorship, funding and networking opportunities. 88mph invests in 'web/mobile startups that target the African markets'. 88mph has two more hubs on the African continent, one in Kenya and another in Nigeria. Startups resident at the Cape Town Garage include Wabona, Near A Builder, Weaver, BabyGroup, Graphflow, ApexPeak and others. As of June 2015, 88mph announced that it is taking a break from investing in startups and will focus on growing those already in business to realise return on investment. Source: www.88mph.ac

6 CODEBRIDGE

Codebridge has two incubators, one in Cape Town and one in Durban, focused on re-inventing how day to day stories are told in the time of the digital information age and 'brings together elements of data, tech, journalism and activism'. It provides 'a cool space where you can plot, plan and create, as well as media coverage'. Codebridge runs workshops including movie evenings, data requests, accountability workshops and community evenings. For more information go to www.codebridge.org.za

7 CODE X

Code X is a technology hub focusing on training in computer programming for matric certificate holders, undergraduates, as well as those who have work experience but need a new skill. It identifies, trains and finds jobs for young professional software developers. Code X partners include MTN Foundation, MLab Southern Africa, V&A Waterfront and others. For more information go to: www.projectcodex.co.za

8 DADDY O

Daddy O was a shared work space located in Woodstock, Cape Town, established for previously disadvantaged persons and offered a free entrepreneurship programme for a period of six months. It is unfortunately no longer active. Source: www.daddyo.co.za

9 ENTREPRENEUR INCUBATOR AND ACADEMY

This is mainly a training academy for entrepreneurs and businesses. Based in Cape Town, it offers business incubation, business coaching, mentoring and business training. For more information go to: www.spice4life.co.za

10 GROWTH SPACE

This co-working space, located in Somerset West, is a community of freelancers and creatives who share ideas, form collaborations and grow their business networks. For more information go to www.growthspace.biz

11 IMPACT AMPLIFIER

Impact Amplifier, located in Cape Town, offers a mentorship programme, advisory services on access to funding from local and international investors, business development services designed for entrepreneurs in specific sectors including environment, technology and health. Impact Amplifier works with the startups prior to, during and post investment. The focus is on 'eco-innovators, 'green business ideas addressing energy, water, waste, food security and other climate issues'. For more information go to www.impactamplifier.co.za.

12 LAUNCHLAB

LaunchLab, located at the University of Stellenbosch, offers working and networking space, coaching and mentorship to startup companies. This business incubator 'supports mainly technology and innovation businesses in ICT, cleantech, agriculture and education'. LaunchLab provides support through its contacts and network for accessing funding from sources such as Nedbank and the Department of Trade and Industry (the dti). Entersekt (authentication and mobile security solutions provider) is the lab's start-up success story. For more information go to www.launchlab.co.za.

13 MTN SOLUTION SPACE

MTN Solution Space is an innovation and entrepreneurship hub located at the Graduate School of Business at the University of Cape Town. Sponsored by the MTN Group, it provides 'shared workspace and learning space' and is open to the public. It is a space where startups can build solutions, collaborate and form partnerships to solve complex social and business challenges. It aims to bring together all interested and affected stakeholders from government, civil society, business and academia. Source: http://www.gsb.uct.ac.za/s.asp?p=518

14 NEW VENTURES STUDIO

New Ventures Studio, based in Cape Town, works only with youth between the ages of 16 and 35. The qualifying entrepreneurs complete an entrepreneurial course before incubation in the studio. The studio provides start-up services, office space, mentoring and other services. The entrepreneurs do not have to have cash up front – all the services are offered on credit of R150,000 and the studio 'takes' a 20% share of the business. The entrepreneurs get access to a pool of investors to finance their new ventures. For more information go to: www.newventuresstudio.co.za

15 PLATFORM 9

Dubbed 'the new home of start-up innovation', Platform9 is located in Cape Town. It offers a shared working and ideas space, training, mentorship and a coding lab. Access is for interns and trainees and includes mentoring and supervision in the fields of administration, IT, marketing and coding, with the objective to provide back end office support to SME's. Source: www.platform9.co.za

16 RLABS

RLABS is a global movement with its South Africa office in Athlone, Cape Town. This hub is a social upliftment centre where 'the core activities are skills and training, community development, social and disruptive innovation, mobile and Internet solutions, social enterprise incubation, impact investing and social franchising'. With the slogan 'making hope contagious', RLABS is a community based centre partnering with academic institutions to empower communities and offers free training, start-up incubation, mentorship, and funding to social entrepreneurs. It uses living labs methodologies in its activities. For more information go to: www.rlabs.org

17 SEED ACADEMY

Seed Academy is one of the many business incubators based in Cape Town. It is 'part of Seed Engine, one of the first ICT accelerators to launch in South Africa'. Seed Academy offers support at all stages of business development from start-up to market development, providing training, business support and mentorship, access to markets and finance and other services. For more information go to: www.seedacademy.co.za

18 SILICON CAPE INITIATIVE

Silicon Cape Initiative, based in Cape Town, has been in operation since 2000 and is one of the top ICT business incubators. Its vision is to bring together investors, technical talent and entrepreneurs,

and to foster 'world class global IP start-up companies'. This initiative aims to create awareness, branding, build community and assist with regulatory obstacles. For more information go to www.siliconcape.com.

19 SPIN STREET HOUSE

This tech hub, located in Spin Street, Cape Town is a founding member of the Seedspace global network. It is home to a wide variety of individuals and groups working in diverse disciplines including startups, business development, architecture, design, photography, journalism and academia. Spin Street House offers shared working space, meeting rooms, networking opportunities, marketing benefits, access to high speed Internet and other services. It offers different usage packages depending on individual needs and affordability. Businesses using Spin Street House include Indie shuffle, Timbuktu, Thursday Projects and Eye Supply. Source: www.spinstreet.co.za.

20 SPRINGLAB

Springlab, a technology incubator based in Cape Town, is a local partner organization that 'facilitates market entry by international Internet companies'. It offers 'advisory services and execution support via joint ventures for an African expansion', as well as capital, assistance with marketing and software development, and other services. Like the Grindstone, it assists startups with strategic partnerships in various industries. The following are some of the startups housed at the incubator: RecoMed, Geist. For more information go to www.springlab.co

21 STARTUP90

The startup90 idea is to launch high growth, high impact startups and to foster business acceleration. It offers mentorship, networking opportunities and other services, seeking to advance using technology to solve practical problems in the healthcare, agriculture, energy and finance sectors. Some of the startups housed here are: PayFast, EZ terms and Wonderland Collective. For more information go to: www.startup90.com

22 THE BUREAU

The Bureau is a shared working space for photographers and videographers located at the Woodstock Exchange, offering co-working space, high speed Internet, a photographic studio and a space for events and workshops. For more information go to www.woodstockexchange.co.za and www.the-bureau.co.za

23 THE GRINDSTONE ACCELERATOR

The Grindstone is a structured business development programme. Based in Cape Town, it works with innovation-driven businesses and offers assistance to entrepreneurs in respect of funding and securing international partnerships, assisting with business skills transfer, mentoring, financial and legal compliance, and other services. Partners include FNB Business, M&C Saatchi, ENS Africa, Microsoft and others. Startups at this incubator are Apurimac Media, Eluminary Inc., Framework One, amongst others. For more information go to: www.knifecap.com

24 TWENTY FIFTY

Another Cape Town co-working space, Twenty Fifty, takes the shape of a 'clubhouse' for entrepreneurs, freelancers and 'in-betweeners'. In the words of one of the co-founders, 'we wanted to create the kind of environment where those chance encounters aren't left to chance, a physical space where serendipity is accelerated'. The space is designed for small teams and individuals. Members include Mahala, Indie Shuffle and Wikimedia. For more information go to www.desksurfing.net and www.ventureburn.com

25 UMBONO

Umbono was a Google tech initiative established to assist tech stars, entrepreneurs and business leaders with Google mentorship and financial assistance i.e. seed capital, angel investors. Google wanted to 'strengthen the web ecosystem across Africa' and encourage growth of the developer community. It offered free office space, bandwidth, funding, training and other services. Startups housed at Umbono included Peach Payments, TaxTim, Imerio Communications, Gigham and others. Unfortunately, there is no confirmation whether the incubator still exists as the website is not operational.

26 WORKSHOP 17

Workshop 17, located at the V&A Waterfront, Cape Town, offers space for 'startups, experienced companies, profit and non-profit' and hosts 'more than 240 entrepreneurs, innovators, professionals and 80 companies'. Amongst other services, the hub provides co-working space, high speed Internet, printing and other facilities. It hosted the 1st Coworking Africa Conference on 15 March 2016. For more information go to www.workshop17.co.za

GAUTENG INNOVATION HUBS/CENTRES

Below is a map of Gauteng province, the main economic hub of South Africa, which has the second highest number of tech hubs recorded in this overview:

Figure 6 Map of Gauteng province



Source: Htonl (2016a)

We identified 15 tech hub sites or software coding activities in Gauteng, including Awethu Project www.awethuproject.co.za; Bizspark www.bizspark.co.za; Black Girls CODE Johannesburg Chapter https://www.meetup.com/BlackGirlsCodeJHB/; CodedinBraam www.codedinbraam.wordpress.com; House4Hack www.house4hack.co.za; Raizcorp www.raizcorp.com; Riversands Incubation Hub www.riversand.co.za; Softstart Technology www.softstartbti.co.za; Standard Bank Incubator https://www.youtube.com/watch?v=T23tbkb7pMA and SW7 (start with 7) www.sw7.co.za

Thumbnail images of some of Gauteng-based tech hubs are presented below.

Figure 7: Images of Raizcorp tech hub



Sources: www.raizcorp.blogspot.com and www.twitter.com

Figure 8: Images of Riversands Incubation Hub



Sources: www.thesmallbusinesssite.co.za and www.riversandshub.co.za

Figure 9: Images of The Innovation Hub, Pretoria, Tshwane metro municipality



Sources: www.youthvillage.co.za, www.twitter.com and www.naledi3d.com

Figure 10: Images of Tshimologong Digital Innovation Precinct, Braamfontein and the Fak'ugesi Digital Africa Festival



Sources: www.disrupt-africa.com, www.wits.ac.za, www.mg.co.za and http://tshimologong.joburg/

27 ALPHACODE CLUB

Referred to as 'the home of next generation financial services', AlphaCode Club, located in Sandton, was established by Rand Merchant Investment Holdings as a way of transitioning into the market in disruptive technologies for the financial services sector. This tech hub offers co-working office space, facilitated networking opportunities, informal mentorship and events. It operates across a wide range of financial services, including financial education, insurance, tax, investments and other services, with startups such as Bitsure (blockchain), Bright on Capital (lending), Isazi Consulting (B2B solutions), Maxicash (remittances), My Treasury (investments), SASA Solutions (data analytics), SnapScan (payments), and others. AlphaCode has the backing of Rand Merchant Investment Holdings, Discovery, First Rand, MMI Holdings and Outsurance, amongst others. For more information go to www.alphacode.co.za

28 AWETHU PROJECT

Awethu Project, a business incubator based in Johannesburg, offers entrepreneurs practical business skills through business training, mentorship and an investment programme for all stages of the business. It provides networking sessions and group work with fellow entrepreneurs and up to ZAR5,000 startup funding. For more information go to: www.awethuproject.co.za

29 BIZSPARK SOUTH AFRICA

This start-up incubator, based in Johannesburg, assists early-stage startups with access to Microsoft software development tools and training, networking with key industry players, and access to funding and potential investors. Being part of the incubator helps with marketing and visibility. Startups/SME's housed at the incubator include TechFolio, PracMate and Innovation Lounge. For more information go to: www.bizspark.co.za

30 BLACK GIRLS CODE, JOHANNESBURG CHAPTER

The Black Girls Code group was founded in 2012 and is based in Johannesburg. The group's mission is 'to empower young women of color between the ages of 7-17 to embrace the current tech marketplace as builders and creators', see https://www.meetup.com/BlackGirlsCodeJHB/

31 CODED IN BRAAM

Coded in Braam is one of the 'meetups' in Braamfontein specialising in software development from beginner to advanced levels. Its aim is to build tech capacity and build up towards getting involved in projects that positively impact on the local community. It collaborates with other similar meetups. For more information go to: www.codedinbraam.wordpress.com

32 HOUSE4HACK

House4Hack takes a 'collaborations' no-cost approach between technology experts (who want to take a break from their day-to-day) jobs and entrepreneurs. Enerweb and Go2Cloud are some of the current sponsors. Future plans include providing prototyping tools, providing access to funding, mentorship, and training in various sectors. House4Hack is involved in computing, programming, hardware development, robotics and automation. For more information go to www.house4hack.co.za

33 JOZIHUB

The Jozihub, located in Milpark, Johannesburg, provides 'space to share ideas, collaborate and explore the opportunities'. It also provides members with 'access to a network of innovators and inspirational events and activities' (Jozihub, no date). The hub hosts 43 startups, more than 258 events, has more than 32 mentors, and more than 10 partners. It offers workspace, private boardroom with presentation equipment, event space, high speed Internet and printing facilities. Startups operating from Jozihub include Big City Urbanists, Spaza Shop Media, Tshepo the Jeanmaker, Yosal Technologies and Zartner Technology. For more information go to www.jozihub.co.za

34 RAIZCORP

Raizcorp is a business incubator that has been operating since 2000, preferring to be referred to as a 'prosperator'. Its serves over 3000 entrepreneurs per annum across a range of sectors. Raizcorp offers guidance in business, training, mentorship, access to finance and markets for entrepreneurs, and guarantees results. Partners include RubiBlue, Switch People Solutions, MiniMax and others. For more information go to: www.raizcorp.com

35 RIVERSANDS INCUBATION HUB

Riversands Incubation Hub, based in Midrand, Gauteng, is a partnership between Century Property Development and The Jobs Fund and focuses on general entrepreneurship. The objective of the hub is to work with startups and established businesses, to provide business skills and training programmes and to stimulate an interest in entrepreneurship. The hub offers space, networking opportunities, support services, coaching, training, access to funding and other services. For more information go to www.riversands.co.za

36 SOFTSTART TECHNOLOGY

Softstart Technology is a business and technology incubator located in Midrand, Gauteng, offering a variety of services in entrepreneurship and business development for new, small businesses. Services include mentoring, infrastructure support, and guidance on compliance matters, financial management, HR and other business processes. Startups and small businesses utilising the Softstart space include The Seed, Tharolla Solutions, Meridict Systems, Sai Telecoms and Technovision. Source: www.softstartbti.co.za

37 STANDARD BANK INCUBATOR

The Standard Bank approach takes the form of a business incubator, virtual incubator, tech incubator, and high growth accelerator. It provides access to finance, business support and guidance, access to markets and business training, and runs programmes to accelerate business growth. For example, it

held the Sw7 Accelerate programme in October 2015 and opened an innovation lab. For more information go to: www.standardbank.co.za

38 SW7 (START WITH 7)

SW7 is a tech innovation incubator in Johannesburg, which makes the claim of being 'the largest mentor led tech innovation accelerator in Africa'. It provides a number of services including co-working space, incubation, high speed Internet, mentoring and accelerator programmes, in partnership with other tech hubs like Workshop17, BizSpark and the Standard Bank Incubator Programme. Its programmes include SW7 legal, invest, express and go to market. For more information go to: www.sw7.co.za

39 THE INNOVATION HUB

The Innovation Hub, located in Pretoria in the Tshwane Metropolitan Municipality, is the main publicly-funded science and technology park in South Africa, supporting 'innovation and enterprise development' in the 'ICT sector, advanced manufacturing, green economy and biosciences'. It is wholly owned by the Gauteng Provincial Government. The hub hosts in the region of 27 companies, including Innocentrix, National Space Agency and T-Systems. For more information go to www.theinnovationhub.com

40 THOUGHTWORKS

Thoughtworks has 40 offices in 14 countries and its South Africa office is located in Braamfontein, Johannesburg. This group of IT consultants and technologists is working to establish a continent-wide programme to advance the IT industry. The Johannesburg office has participation from over 10 African nationalities. Thoughtworks operates in collaboration with other 'meetups' like CodedinBraam and assists groups like Black Girls CODE (Johannesburg Chapter) with IT training. It offers space, and hosts and sponsors hackathons, networking events, recruitment boot camps and other activities. For more information go to https://.thoughtworks.com/johannesburg-office.html; www.codedinbraam.wordpress.com and https://www.meetup.com/BlackGirlsCodeJHB/

41 TSHIMOLOGONG DIGITAL INNOVATION PRECINCT

Officially launched in September 2016, Tshimologong is a digital innovation hub located in Braamfontein, Johannesburg, a partnership between University of Witwatersrand (Wits), business, industry and government. Funding is in the form of sponsorship opportunities, partnership resource support through financial and non-financial means, and membership fees charged to tech developers. Through the JCSE and LINK Centre, the hub offers a wide variety of certificated short courses from NQF level 5 to 8, and convenes degree programmes at NQF level 9 and 10. The tech hub hosts a research laboratory [IBM Research Lab]; houses startups; provides platforms and mentoring for tech developers; offers software architecture training and agile development fora to the education (schools programme) and financial sectors (banking software skills academy), amongst other services and sectors. It provides formal and informal working spaces and broadband connectivity. For more information go to http://tshimologong.joburg/; http://fakugesi.co.za/; http://tshimologong.joburg/tag/ibm-research-lab/ and www.wits.ac.za/linkcentre/

KWAZULU NATAL INNOVATION CENTRES/HUBS

KwaZulu-Natal is the third of the provinces in terms of economic activity and has a population of over 10 million people, but is lagging behind in terms of technology-focused business incubators.

Figure 11 Map of KwaZulu-Natal province



Source: Htonl (2016b)

The following tech hubs were identified in KwaZulu Natal (KZN), and with ongoing investigation, more may be revealed.

42 INVOTECH

InvoTech designs solutions in green technologies, creative and digital technologies, and agricultural impact technologies. This tech hub makes a range of resources easily accessible to entrepreneurs and startups, including skills and knowledge development, equipment and other resources. It offers all round support from the initial idea stage through business development, mentoring and marketing. Durban University of Technology and the Technology Innovation Agency (TIA) are partners with InvoTech. One of the successful startups is the South African Cane Growers, 'the biogas pilot project', engaged in converting sugar cane to biogas. For more information go to www.invotech.co.za

43 SMARTXCHANGE

This Durban-based tech hub aims to 'provide enterprise development services to small, medium and micro enterprises (SMME's) in the media, information communication technology and electronic sector' working with the media ICT and electronics sector (MICTe), tertiary institutions and government. SmartXchange offers funding to SMME's in the MICTe space. SMME's housed at SmartXchange include Indonsa Consulting and Training, Ndiza Information Systems, Nyachengos Video productions and Vanquisher Technologies. For more information go to www.smartxchange.co.za

EASTERN CAPE INNOVATION CENTRES/HUBS

The Eastern Cape is one of the provinces with the lowest gross geographic product (GGP) and household income, yet is amongst those where business incubators with a technology focus have arisen.

Figure 12 Map of the Eastern Cape province



Source: Htonl (2016c)

Two tech hubs were identified in the Eastern Cape, one in East London and one in Queenstown. A further search may reveal more.

44 & 45 EASTERN CAPE INFORMATION TECHNOLOGY INITIATIVE
This initiative is designed to accelerate successful development of entrepreneurial companies through various resources and services. The incubator, located at two sites, one in East London and one in Queenstown, offers mentorship and coaching, skills development, networking opportunities, financial management, and access to potential funders and investors. The areas of focus include computer hardware and software, film and photography, web and app development, learning and innovation, media and communication. Startups and small businesses housed at these incubators include Amanzi.com, MK2 Networks, Miso Media House, SivuBuhle Media and Widelink Technologies. For more information go to www.eciti.co.za

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