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COMPARATOR REPORT ON THE STATE OF DIGITAL LITERACY

WP2: Diagnostic study – digital landscape in South Africa

Deliverable 2.3: Comparator report on state of digital literacy in participating regions at the end of the project

Isabella Venter and Leona Craffert, University of the Western Cape

Darelle van Greunen and Alida Veldsman, Nelson Mandela University

Marina Candi and Hallur Tor Sigurdarson, Reykjavik University





This deliverable consists of two parts. First, a tabulated comparison of a number of key metrics at the beginning of the CGF project in 2016 and the end of the project in 2019. Second, a summary of the direct achievements of the project and current and future benefits to the provinces involved.

1. Metrics comparison

The following tables provide comparisons of a number of key metrics for South Africa along with notes on these metrics and their changes during the course of the CGF project.

Table 1: General conditions

Metric	2016	2019	Notes
Unemployment	26.5%	27.1% ¹	South Africa has a very persistent unemployment rate, with an average of about 25% during the last 20 years.
Population living below poverty line	53.8%	*	Unemployment is the number one reason for poverty in South Africa
Population in rural areas	35%	37% ²	The urban population has been steadily increasing in the past decades, e.g. from 55.8% in 2000 to 63% in 2019.
GDP (billions)	\$357	\$386 (estimate)	GDP Growth was 1.4% in 2017 and 0.8% in 2018. In 2019 GDP per capita ranks no. 32 of 196 countries, but no. 91 in GDP per capita ³

*Newer data are not available.

¹ Q4, 2018, source: Trading Economics - <https://tradingeconomics.com/south-africa/unemployment-rate>)

² Source: Worldometers - <https://www.worldometers.info/world-population/south-africa-population/>

³ Source: Countryeconomy.com - <https://countryeconomy.com/gdp/south-africa>



Table 2: Entrepreneurial environment.

Metric	2016	2019	Notes
Economic development level	Efficiency-driven ⁴	Efficiency-driven	South Africa's economic development level remains classed as efficiency-driven.
Perceived entrepreneurship opportunity ⁵	40.9%	43.2%	Positive perceptions about entrepreneurship have increased by about 6%.
Total Early-stage Entrepreneurial Activity (TEA) ⁶	9.2%	11%	TEA has increased by about 20%, which is a substantial increase.
TEA gender ratio (F/M)	60%	69%	
GDP per capita	\$6483	\$6050	GDP per capita has gone down by about 7%
Opportunity/Necessity motive	1.1 ⁷	1.5	

As can be seen in Table 2, entrepreneurship has increased as GDP per capita has decreased. Although this might be seen as an indication of increased necessity-based entrepreneurship, the trend has actually been for a higher proportion of opportunity-based entrepreneurship, which is now 50% more prevalent than necessity-based entrepreneurship. In 2015, opportunity-based entrepreneurship was 10% more prevalent than necessity-based.

⁴ Classification of economies by economic development level is adapted from the World Economic Forum (WEF). The factor-driven phase is dominated by subsistence agriculture and extraction businesses, with a heavy reliance on (unskilled) labor and natural resources. In the efficiency-driven phase, an economy has become more competitive with further development accompanied by industrialization and an increased reliance on economies of scale, with capital-intensive large organizations more dominant. As development advances into the innovation-driven phase, businesses are more knowledge-intensive, and the service sector expands. <http://weforum.org>.

⁵ Percentage of adults who have positive perceptions about starting a business (aged 18-64)

⁶ Business setup to 3.5 years of operation

⁷ Source: Global Entrepreneurship Monitor (GEM) 2015-2016 report



Table 3: Digital literacy conditions.

Metric	2016	2019	Notes
Network Readiness Index (NRI)	#65	*	In 2016 South Africa had risen to 65th position amongst 139 world countries, and was identified as one of the seven “top movers” (5th position). This drastic change was attributed largely to improvements in infrastructure and affordability.
ICT Development Index ⁸ (world position)	#88	#92 ⁹	The most recent report concludes that “South Africa is at the forefront of the region’s technological development with the latest broadband technologies and wide coverage. This has been enabled by a suitable regulatory framework and a competitive private sector-driven market. Cost remains an issue due to significant duplication in backbone networks, with a need to move to a cost-based open access regime.” ¹⁰
The Web Index (World Wide Web Foundation)	#45	*	South Africa ranks #45 overall of 86 countries worldwide. The country’s lowest ranking is for relevant and local content and the country’s lowest score (31.89 out of 100) is for economic empowerment of the Web. The two main factors that explain this are believed to be education level and inequality.

* Newer data are not available.

⁸ ICT Development Index conceptual framework and methodology, 2016, <http://www.itu.int/en/ITU-D/Statistics/Pages/publications/mis2016/methodology.aspx>

⁹ 2017. Source: https://www.itu.int/en/ITU-D/Statistics/Documents/publications/misr2017/MISR2017_Volume1.pdf

¹⁰ Source: *Measuring the Information Society Report 2017 – Volume 1* (https://www.itu.int/en/ITU-D/Statistics/Documents/publications/misr2017/MISR2017_Volume1.pdf)



2. Direct project achievements

The CGF project is designed to grow from local initiatives with local outreach. Vital for this purpose are the e-skills initiatives which this project funds, as well, in some cases, as digital storytelling circles and taught modules, developed to enhance participants' social innovation skills and improve digital literacy. Following from that, the CGF online platform makes it possible to create a network – and impact – both national and international.

In this section we discuss local CGF activities, involving the establishment of digital and social innovation (DS-SI) laboratories, in particular. The laboratories are established to run courses to enhance digital literacy and train people in DS and assist them in forming and disseminating their social innovation (SI) stories. The following summaries are based on interviews with South African CGF participants (five universities) involved in setting up the digital laboratories. Interviewees were asked questions to gain an understanding of the current situation of setting up and running the laboratories. The interviews were conducted in May 2019. Updates were obtained in follow-up contact in August 2019.

University of the Western Cape (UWC) – Cape Town

DS-SI Laboratory

On April 24, 2019 UWC held an event to launch and create awareness around UWC's digital laboratory. The main lab, containing the required equipment, is located on campus and will be open to students and people outside UWC. The staff running the lab will be trained at Rhodes University (RU). The organizers of UWC's lab will recruit students to become teachers or mentors at the lab. In addition to the lab on campus, a so called "pop-up" lab will be made available. This is a mobile and temporary lab with 12 workstations, that can for instance, be set-up in different townships in and around Cape Town.

Outreach

Between six and seven connections have been made with local actors with trusted footprints in local communities. These can potentially become hosts and run the pop-up laboratory. One of the intermediaries within the Atlantis area is already engaged in formalising the relationship with UWC, by means of a Memorandum of Understanding. The CGF project has already had considerable impact at UWC, and raised awareness among faculty and management. For instance, members of the faculty that have been working with DS, and have begun to bring DS to bear on social innovation. The CoLab is in the process of finalising UWC's first accredited short course on social innovation to be hosted



within the Information Systems Department. The university is currently revising its innovation strategy and policy and social innovation has been included as an integral part of the new strategy. The objective is to strengthen the university's capability and capacity in social innovation research and application. Finally, an agreement has been made with a local newspaper to share weekly social innovation stories from the CGF platform, when it has been made available.

Challenges

Locating the relevant networks of social innovators has been challenging and Cape Town is a huge city, making it difficult to reach all areas of the city and its surroundings.

University of Johannesburg (UJ) – Gauteng Province

Digital Laboratory

The lab will be launched on September 12, 2019. UJ has 4 campuses, but the lab will be located on the Soweto campus. Here, there is the easy access to local communities and relevant staff. The organizers are also looking for additional sponsorship – such as from Microsoft and Apple – to fund additional equipment.

Outreach

UJ ran a pilot for Common Good First, in which 5 social innovation projects were developed. Consequently, they now have 2 digital stories that can be uploaded. In September, 7-8 profiles/stories are anticipated and an additional 10 stories are expected to be completed in October. CGF has created university wide interest among faculty and students. The increasing interest in DS has influenced students, capturing their honours research in digital stories. A collaboration with a TV station (a music channel) has been established. The channel will broadcast digital stories for educational purposes. Digital stories will also be broadcast on big screens in the canteen at UJ.

Challenges

Finding dedicated space for the lab proved challenging. The organizers have faced additional logistic problems, including finding resources to administrate the lab. The promotion of the lab – creating hype – is an ongoing challenge, which will need to happen through self-promotion.

Main victories

In light of the shortage of on-campus physical facilities, finding space and securing it was a significant milestone for setting up the lab.



University of the Free State (UFS) – Free State Province

Digital laboratory

The lab was launched with an event on May 10, 2019. A permanent lab is now located on campus in Bloemfontein. A second permanent, but smaller, lab will be located on the QwaQwa campus. There are plans to establish a mobile pop-up lab made available to people in different areas, in shorter periods. The first pop-up lab is planned in Trompsburg, a poor rural area, where UFS' medical faculty already has connections.

Outreach

Approximately 50 people showed up for the launch of the lab in May. The event contributed to the necessary institutional buy-in. The following training sessions have been held:

- Training session for entrepreneurs – 25 farmers
- Training session student entrepreneurs – 9 students
- Training in digital stories (University of Hasselt) – 10 students
- Digital Story circle – 7 staff

There are currently 30 profiles ready for upload and 10 digital stories are anticipated.

Challenges

As in other cases, finding space was challenging and required locating key stakeholders and potential allies of the project.

Victories

Success in creating institutional attention and momentum for DS and SI. This is true for increased research interest, but there is also a realization of value of DS and SI in UFS' management.

Correspondingly, there is an approved alignment of social innovation with the university's strategic emphasis. Contributing to the institutional success is the realization that DS complements the old South African tradition of oral story telling.

Permission has been obtained from the Faculty of Health to launch the Trompsburg Common Good First Mobile lab. All medical students are obliged to complete a week of practical community work and each group of four will complete a digital story



Nelson Mandela University (NMU) – Eastern Cape Province

Digital laboratory

Lab launch date was May 10, 2019. There are three labs, one is permanent and on campus. There are also two mobile pop-up labs. The on-campus lab supports students and social innovators. The two pop-up labs are to be located in Masifunde, in the Walmer township, and Gelvandale in the northern area of Port Elizabeth. Three individuals are dedicated to the work and training taking place in the labs.

Outreach

Approximately 30 community groups have been introduced to the CGF platform, and 7 profiles have been uploaded so far with more expected. There is substantial support and enthusiasm for the CGF platform from people in and outside of NMU's campus. NMU is also interested in adopting the CGF platform into its curricula.

Challenges

Creating awareness for the platform is an ongoing challenge. The high cost of using internet is a persistent challenge for online activity in South Africa, and it has not improved significantly in the past few years. Older generations prefer to use computers, while the younger generations prefer mobile phones, this has consequences for how the platform is going to be used.

Rhodes University (RU) – Eastern Cape Province

Prior to CGF, Rhodes University already had an active community engagement function working with DS. Due to this experience they also run train-the-trainer courses for the other South African universities involved in CGF.

Digital laboratory

RU has a permanent laboratory on campus, open to students, faculty and persons from outside the university. RU has hired two trainers that will run the 3-day DS course. RU runs two so called "semi-permanent" DS labs outside the university's campus. One is the Josa Youth Hub and the lab will be located there, at least until September, 2019. The other is the ADC Centre, training underprivileged children in digital literacy, but also focuses on building new businesses. Both are located in townships and both can be considered as SI projects in themselves. Finally, RU's intent is to offer more mobile pop-up DS facilities manned by experts from the university.



Outreach

RU has run 6 DS train-the-trainer courses, with approximately 75 participants. The Josa Youth Hub lab has approximately 20 people participating in a longer process, where DS and SI are involved. The ADC Centre is already training a group of 10 people in DS. The community engagement team at RU makes a significant contribution to CGF with their previous 75 established partnerships in Grahamstown.

Challenges

Internet connections are not reliable in areas outside of RU's campus and digital literacy is a challenge, especially in the townships.

Victories

Identifying 3 competent facilitators to run DS-SI labs and successfully running 6 train-the-trainer courses. CGF has had a good influence on the community engagement at RU and raised awareness around social innovation.

North-West University – North West Province

Digital laboratory

A mobile lab is in the process of being set up. Launch is planned in 2020 and there are plans to hold story circle events.

Challenges

NWU has 3 campuses, which are located about 300 km apart, so coordination is challenging. But having a mobile lab should enable engagement on all 3 campuses. A single mobile lab in a province of this size will only be a drop in the ocean. NWU has plans to find an external sponsor to expand their footprint.

Victories

Despite the fact that the NWU lab is not yet up and running, they were able to upload 6 profiles and 4 digital stories to the CGF platform with the assistance of consortium members from UFS and NMU.



Summary of CGF achievements

Table 4 provides a summary of the planned quantifiable achievements of the CGF digital labs as of September 10, 2019. And Table 5 provides a summary of the realized achievements at the end of the project, all of which exceed the planned achievements.

Table 4: Summary of planned digital lab achievements.

	Profiles	Digital stories
UWC	15	6+
UJ	7	5-6
UFS	25	10-12
NMU	15	10
RU	15	6+
NWU	6	4
GCU	15	4-6
TOTAL	98	45-50

Table 5: Summary of realized digital lab achievements.

	Digital labs	Profiles	Digital stories	Persons who benefited*
UWC	2	13	4	35
UJ	1	9	3	150
UFS	5	34	18	60
NMU	2	18	13	40
RU	8	22	6	120
NWU	1	6	4	25
GCU	0	9	5	15
TOTAL	19	111	53	445

**conservative estimates*