

Somalia: Youth Employment in the Digital Economy

Investing in Digital skills, Livelihoods and Ecosystem

UNDP Discussion

14th of December



Design workshop UNDP Somalia

Agenda

- 1 Assessment of Future Ready Pilot (Survey & Interview, Lessons learned)
 Presented by Karina Grosheva
- New Digital Economy Program Design
 (Ecosystem, National Priorities, Somali context, Gap
 analysis, Best Practice, Geographic focus, Target audience)
 Presented by Karina Grosheva
- Moving Forward: What's next?

 Facilitated discussion by Abdiwahab Ali

Assessment of Future Ready Pilot

Future Ready Components

Coding & App Development

Digital Storytelling

Foundation Computer Science and Digital literacy

5 cohorts in Mogadishu, Hargeisa & I TOT - 164 participants

1 cohort of 20 people

2 cohorts: 1 People With Disabilities(PwD), 1 for Returnees - 40 people

History of Future Ready Pilot

Ideated based on experience in UNDP Egypt in 2017



How far we have gone? What is next?

Graduates participated in coding & entrepreneurship training

22 ** ** ** ** ** ** ** **

Participants w Disabilities + Vulnerable community

15% 4444444

Female participation



Future Ready Pilot Programme: Coding & Entrepreneurship

Mogadishu 2017

.NET, C#, UWP

Mogadishu 2018

.NET, C#, Xamarin

Hargeisa 2018

.NET, C#, Xamarin

Hargeisa TOT

.NET, Xamarin, Entrepreneurship

Mogadishu 2019

Android Studio, Java, Material Design, Entrepreneurship, HCD

Advanced ITI - Egypt

Exchange programme

Assessment Methodology

Step #1 Survey

Step #2 Interviews

Step #3 Case Study/ Success Story Step #4 Document review

Online survey sent to **164 participants** of core
cohorts, 22 PWD, 20
Advanced trainees using
KoBo

Conducted 10+ Key
Informant Interviews
with trainers/instructors,
local training hubs

Followed up with selected # of participants to collect stories of change

Reviewed Project concept note,
Curriculum, contents & training materials



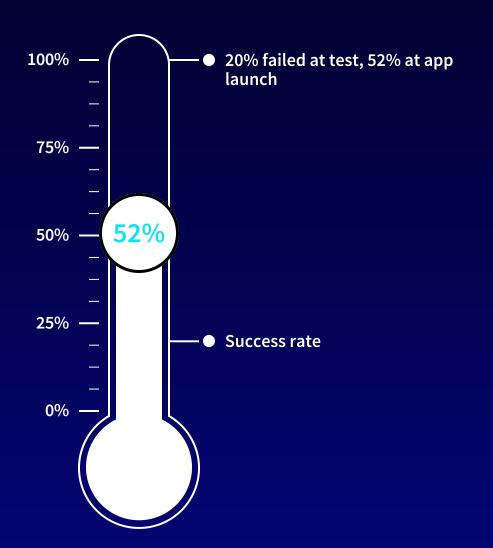
Step #1: Survey



24 responses on survey



Attendance/Success rate





Less than 50% pass rate



More than 10% absentees

Overall satisfaction



"More emphasis on Coding, rather than presentation and business aspect"

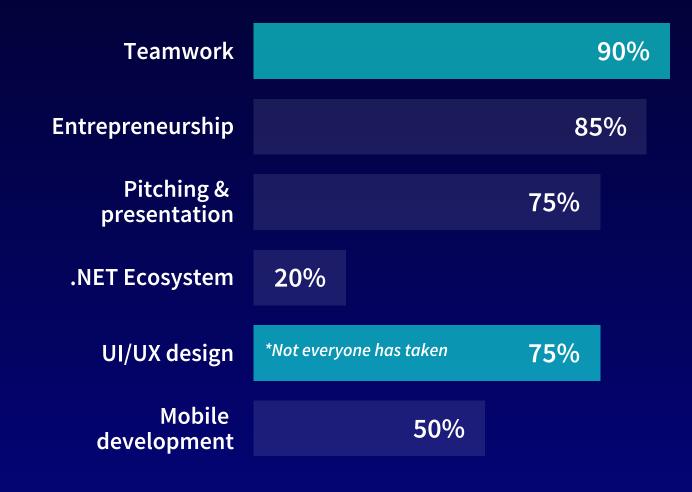
Practical Coding

Certificates

Place, Internet, Connectivity, Equipment



How useful was the element of training?





"For me I think training goes smoothly and effectively but I would like if you can make schedule improvement because first two/three weeks looks senseless I mean it's not important to come from scratch every time"

ABDULKADIR HASHI UGAS, SOSTEC, MOGADISHU 17-18/ITI

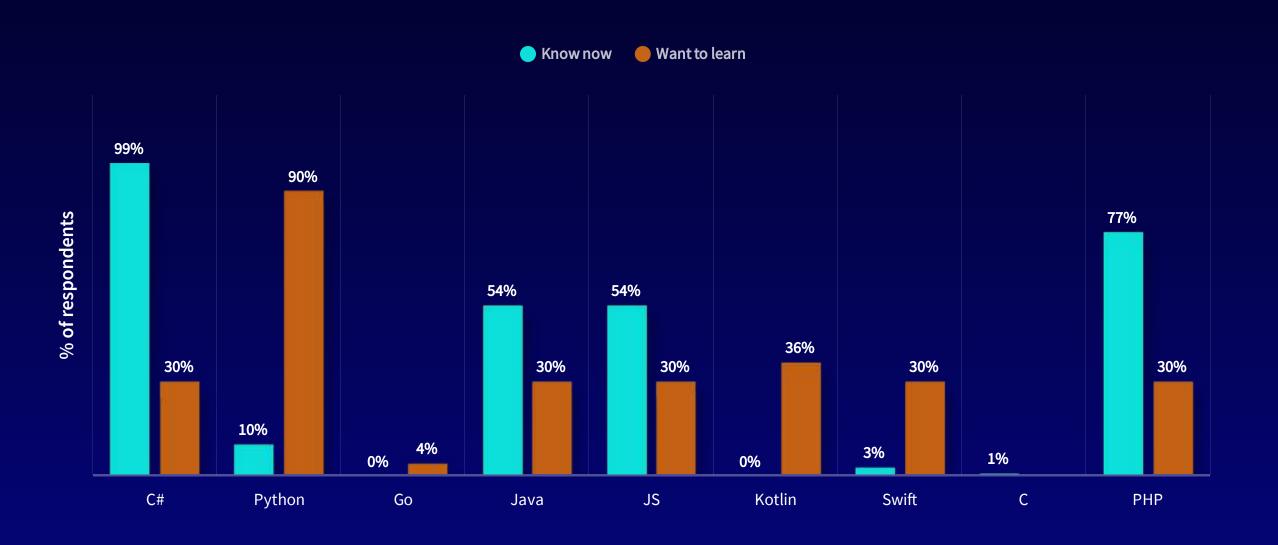
"Provide dedicated laptops b/c most personal computers can't do well with the power users"

SHAAKIR AHMED, HARGEISA - 18

"Make the entry harder so it will not be a waste time on teaching how to install programs, and speed of training will go up if all people are at the same base of coding"

ABDIMAJEED SALAH, HARGEISA - 18

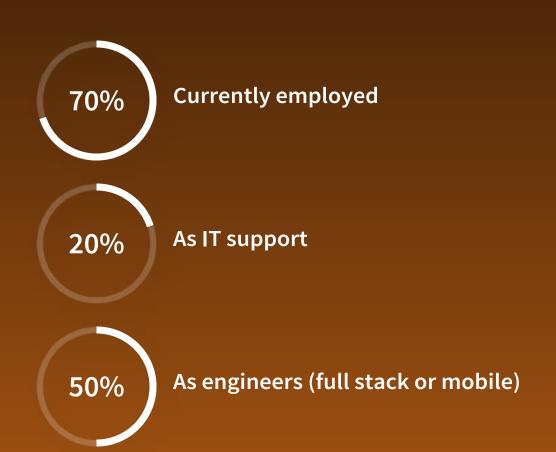
Current Capacity vs Desired Learning



Key trends that interest participants

Internet of things First choice **Machine Learning and Al** Second choice **Big data and Data Science** Third choice **Geospatial data** Four choice Blockchain Fifth choice

Employment post-training

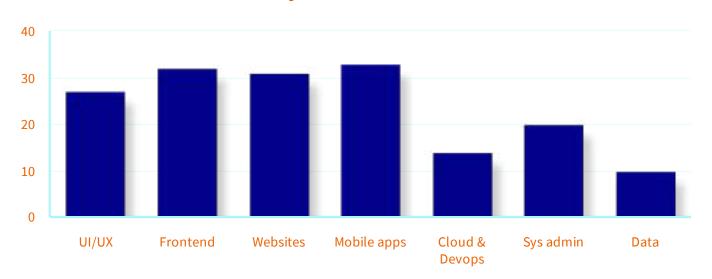




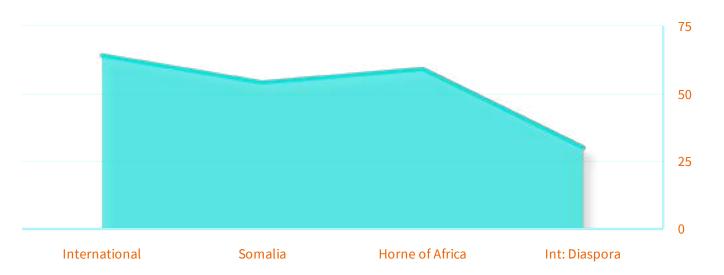
Key challenges of employment:

"Companies require 2-5 year of experience from graduates"

Dream jobs/Jobs in demand



Geographically









Digital Story Telling Pilot highlights

- Organized in partnership with Australian Story telling Agency and University of Queensland as bootcamp - 1 week
- 20+ participants
- Skills: Ideation, Content Creation, Distribution (social media, tools)

Assessment Methodology

Step #1 Survey

Online survey sent to 164 participants of core cohorts, 22 PWD, 20 Advanced trainees

Step #2 Interviews & workshop

Conducted 10+ stakeholder interviews across ecosystem Step #3 Case study/Success Story

of participants to depict key lessons, success stories

Step #4 Document review

Reviewed key training materials, content, tools used

Interview with stakeholders from Pilot programme & Workshop













Key Insights from interviews/ Coding

Overview of challenges and feedback from partners

Curriculum to match market

- Partner-driven not market
- Interest in expanding curriculum
- Non-relevant tools

Local market context awareness

- Internet penetration
- Types of phones: smart phones vs feature phones
- Literacy rates & IVR potential
- Challenges with equipment, infrastructure, connectivity

Training setting & execution

- Teacher to trainee ratio % was too high. Quantity vs Quality
- Promise re certification/accreditation.
- Language barrier (Instructors were all non-Somalis)
- Low participation of females

Follow up & Employment scene

- Low follow up with trainees
- Low follow up with partners (eg. MOU, formalization)
- No pathway options i.e employment, freelancing, etc
- No Market engagement in place to foster employment

Lessons from interviews/Digital Story telling

Short time frame

More training days suggested



Focus

Focus on content creation & Video-making, eg less social media, design etc.



Dream job

Interest to be videographers, content creation, photographers





What would help

Follow ups, Mentorship network, Microfunding

Markets

—

Festival & historical heritage, Media & TV,
Tourism

Certification

after assessment and evaluation

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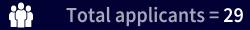
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Mogadishu 2019

The lengthiest cohort with elements of UI/Android Studio, Java & App launch as final test





Ideas submitted = 22

Wire frames = 19

Apps released = 17

Apps Play store = 14

Success & Challenge story #1

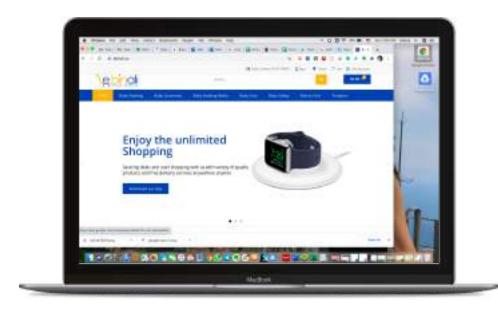
Najib Abdisalan Abdulle, Mogadishu 2019



- Launched app with 10,000 + downloads
- Social impact focused
- No monetization
- Currently working in Uganda, not continuing with the idea

Success & Challenge Story #2

Abdulkadir Hashi Ugas Mogadishu, 2019



- Works in Sostec/Bilan Codes
- Launched numerous web/mobile apps
- Progressive stack: Swift/Kotlin. Willing to study Golang
- Advanced exchange with ITI
- Next?

Success & Challenge story #3

Abdimajid Salah Hargeisa, 2018



- From Saudi Arabia to contribute to Hargeisa ecosystem
- Both waged employment & entrepreneurship potential
- Participation in Coursera, self-learning etc.
- Next?

Success & Challenge story #4

Munira Omar Mogadishu, 7



- From First cohort
- Participated in global hackathons, Andela cohort in Kenya, internships
- Currently works part time with Somali Electoral Commission and part-time Freelancer

Direct feedback from trainees

- Partner driven curriculum does not fit market (MVC, Microsoft tools were not relevant)
- Too much basic learning, eg. foundational computer science was not needed
- No partner/capstone/internship programs provided and they are key
- No enough project-based learning, no enough team work of goal-settings in web development
- International jobs, freelancing are key, but students in Somalia are not aware of pathways, online hakathons, open source git communities

- More soft skills, employability, professional English is required
- Broaden spectrum of digital jobs: engineers, data analysts, content managers - everyone will find his/her way
- Bring local Private Sector to employment/internship programming
- There is a challenge on freelancing with Tax ID, access to banking, if individually vs agency based
- Experiences with other bootcamp: Andela, Moringa School

Assessment Methodology

Step #1 Survey

Online survey sent to 164 participants of core cohorts, 22 PWD, 20 Advanced trainees

Step #2 Interviews

Conducted 10+ stakeholder interviews across ecosystem Step #3 Focus Group Follow up

of participants to depict key lessons, success stories

Step #4 Curriculum review

Reviewed key training materials, content, tools used

Key findings from curriculum review/training materials

- 1 No consistency (3 w- 8 w, different tools)
- **2** Unclear purpose (coding? employability? self-employment? Entrepreneurship?)
- **3** Lesser focus on soft skills, standard tools (gitflow, communication tools, practical application, project management)
- 4 Selection of relevant/market driven technologies (linking to tools, frameworks, programming languages to market demands)



Section 2

New Digital Economy Programme Co-Design

Assessment & New Program design

Step #1 Lessons Learned/ Assessment Future Ready 1.0 Step #2 Digital
Economy Context
Analysis(Aligning
with National
priorities, pledges &
commitments

Step #3 Ecosystem
Mapping

Step #4 Best practice review

Step #5 co-design & Consultation process

Step #6 Develop a Strategic Approach(Concept Note)

Step #7 Fundraising & Resource Mobilization Step # 8 Finalize detailed programme document

Step #9 Endorsement & Launch

What has been done so far



Survey and interview of participants (Future Ready pilot Assessment)



Scouting potential partners: ITI Egypt, CiSCO, Microsoft, Google.



Engaged with hubs and incubators from pilot and further: interviews, workshop



Connected to South-South learnings



Connected with best practice social entreprises - UN funded



Briefing Somalia's Ministry of Labor & Social Affairs (Department of employment and job creation)



Connected with IICPSD for fundraising & PS partnership advice



Somali digital Economy Context Analysis and Ecosystem Mapping(ongoing)



Government & UN Priorities & Pledges 2021-2025

Sets objective in UN Cooperation Framework(UNCF) aligned to National Development Plan (NDP9)

National Employment Policy & Youth Policy

- Focus on TVET and upskilling
- Linking education to employment
- Non-boundary employment & Diaspora linkage

Somalia NDP & UNCF:

- Economic diversification
- Doing business 190/190 to 150/190
- Expedited digital economy application for target groups eg. 2% growth of service sector vs GDP,
 targeting 10,000 youth trained

Inclusion

Global Refugee Forum

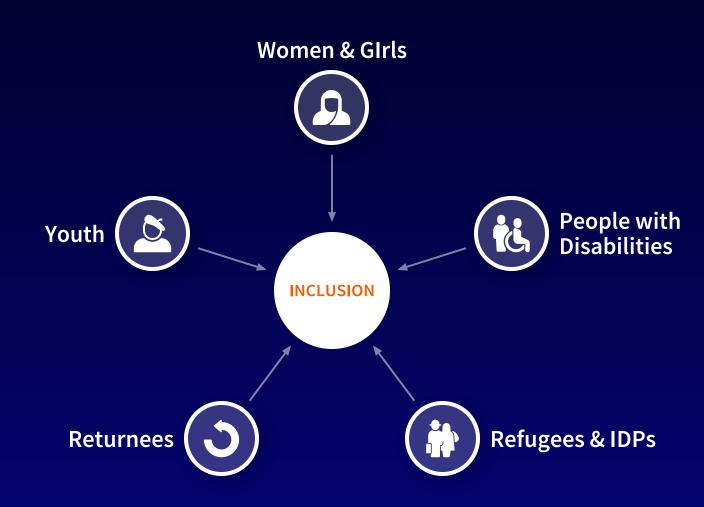
UNDP pledge to support the 'Digital Skills, Livelihood & integration and transition' of IDPs, Refugees & Returnees, where Somali is one of 20 selected countries

ICT strategy

- Connectivity & Broadband internet
- Digital upskilling
- Digital infrastructure, e-government



At the Center







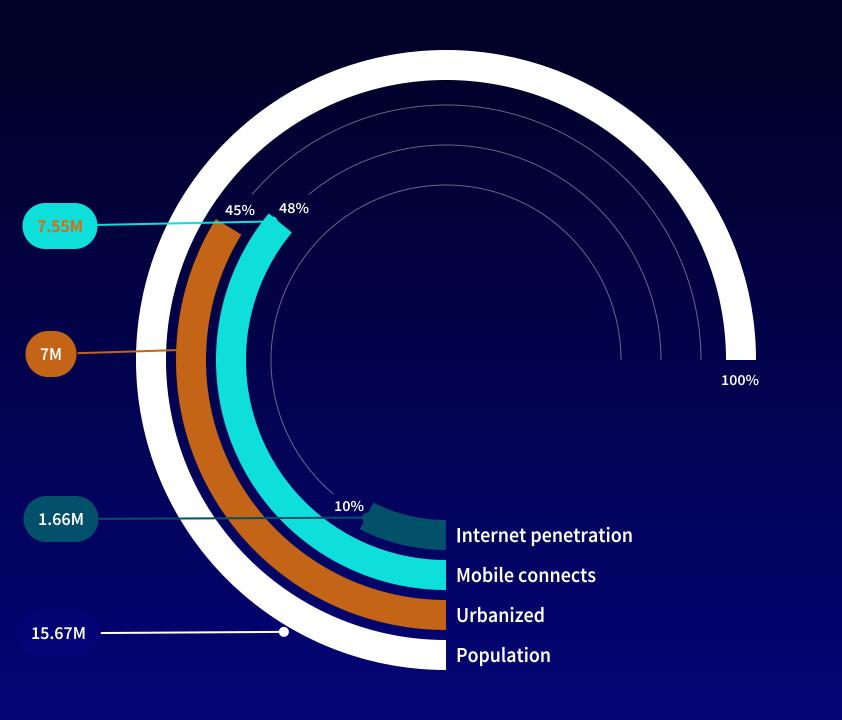


Median age: 16.7

Literacy rate: 38%

2.6M IDPs Returnees

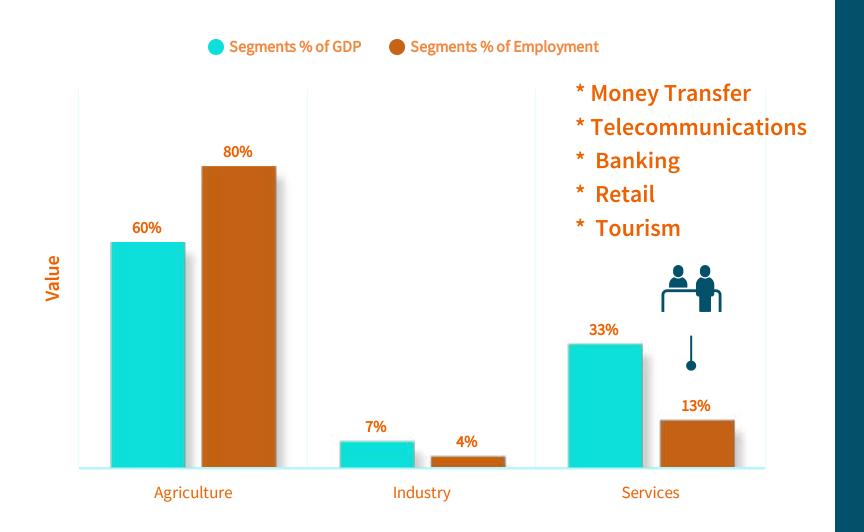
Kenya, Libya, Djibouti, Yemen





There is a growing internet penetration + 8% yearly, but still very low

Key Economy segments



Service Sector growth %

FOR KEY EMPLOYABILITY FOR YOUTH WITH DIGITAL SKILLS IN COMPANIES & ENTREPRNEURSHIP

Djibouti Gulf Of Aden Ethiopia Regions Woqoqyi Galbeed e n Indian Ocean y a

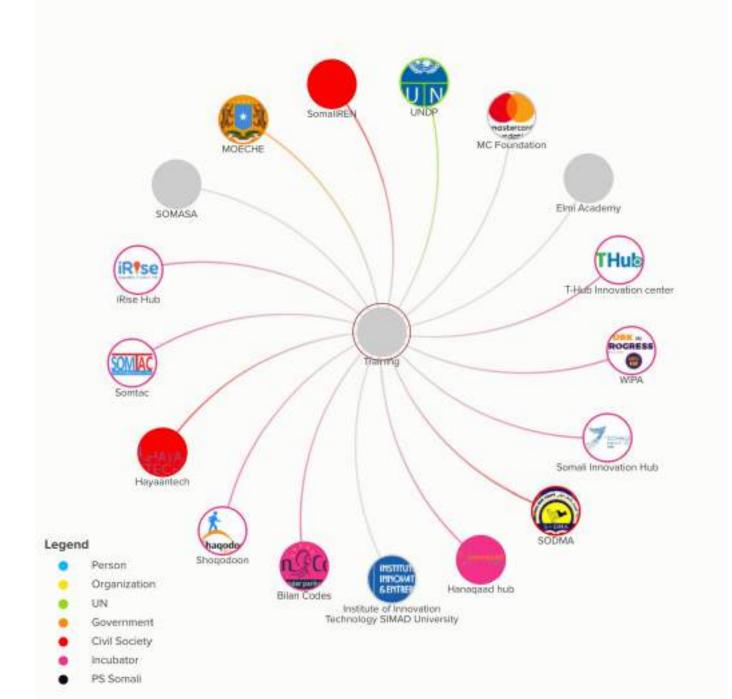
Key growth regions / Hubs / Connected markets

MogadishuHargeisa

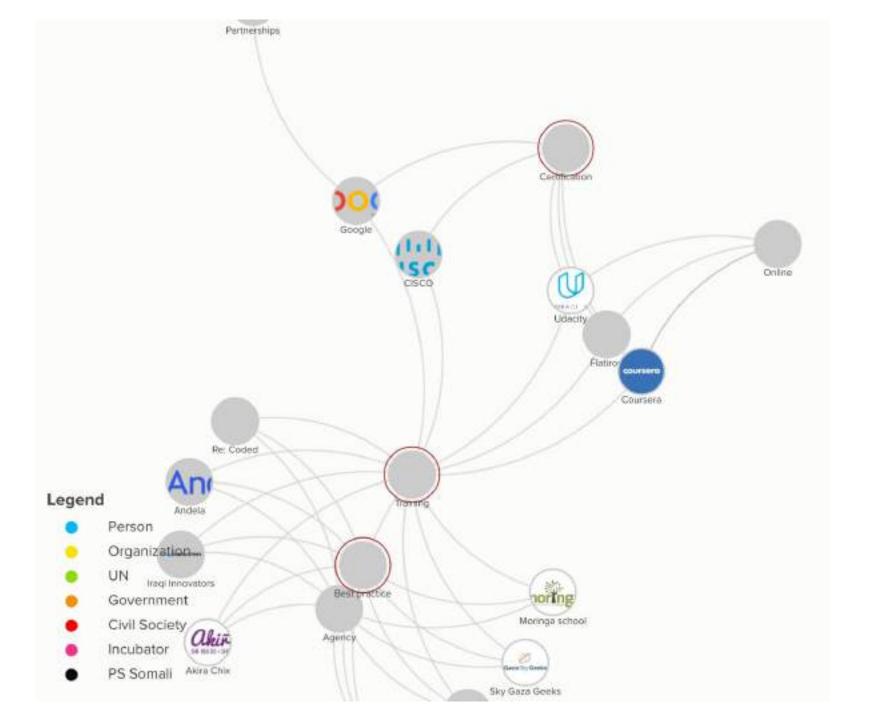
- Diaspora hubs with significant percent of economy % remittances
- Somalia broader region in Horn of Africa
- Connected African & Arab regions

Ecosystem Mapping

Growing Digital Innovation Ecosystem in Somalia



Global best practice|Training & Certification ecosystem



Patterns in our ecosystem...

Strengths

- * Growing number of digital skills training inst
- * Coherence of policymakers to focus on Digital economy going forward & diaspora & private sector development

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Weaknesses

* Little non-aid funding players (mostly aid, global NGOs, limitation of islamic finance in Somalia)

W

* No or little engagement of local private sector as key employers

Opportunities

- * Space for more partnerships with private sector (local & global)
- * Space for more private sector engagement (global & local)
- * Diaspora, global connections

T Threats

- * National connectivity & Office Space & Tech community building disconnect
- * Doing business in Somalia

Best practice review

1 Business model for Employment

2 Market and Partnerships

3 Curriculum & Content

- * Freelancing, Waged employment, Entrepreneurship?
- * Market: local & foreign
- * Agency or fostering individual

- * Private sector partnerships: tech companies
- * Private sector partnerships: medium
- * Funding for entrepreneurship setup

- * Content for local market, or global market?
- * Soft skills, employablity
- * Entrepreneurship training



Models: software engineering focused/waged employment



Se Factory

- Lebanon
- Non-for profit
- Cohort of 400 people, average 40-50
- 2 courses: fundamental & full stack development
- 14 weeks course on site
- Partnership with Beirut Digital District for space
- English volunteers programmes, Global mentorship programme
- 75 hiring partners (medium size) that pay first month fee (Lebanon, Dubai, Global)
- Project based vs Lectures
- Content: PHP, Laravel, React, JS, and AWS

Models: software engineering focused/waged employment



RebootCamp RBK

- Jordan, Tunisia, Iraq
- Non-profit
- Immersive program, bootcamp with 6 months
- Durable skills, problem solving, group work
- Less focus on entrepreneurship more on waged employment
- Strong partnership network with larger companies: SAP, IBM, Silicon valley based companies for hire
- High ROI, expensive model per person
- Emphasis on English level at C1
- Hack Reactor Curriculum for a Full Stack

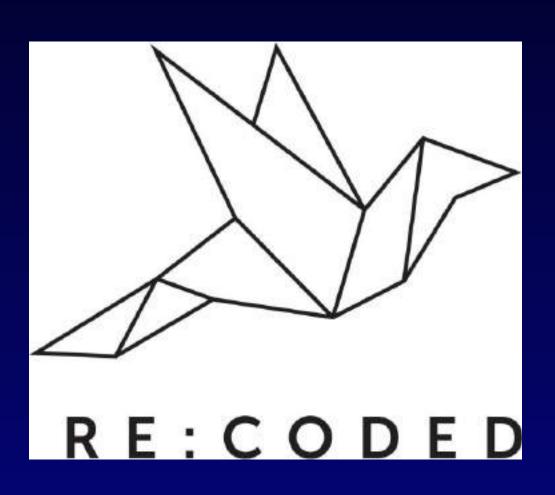
Models: software engineering focused/waged employment



Andela

- Africa including Nigeria, Ghana & Kenya
- For profit
- Operates as academy and hiring agency with selling talent to tech startups globally: building remote teams of engineers
- 500 engineers graduated and working on retainer
- Raised \$180 M funding, last round 100\$M from Zukerberg, Google etc.
- Important brand
- They have an American company for sales
- Recently closed African offices for a fully remote pivot

Models: with entrepreneurship & self-employment



Re:coded

- Iraq, Turkey, Yemen
- Non-for profit
- Cohort of 1800+
- Lighter and more one off programs: Android studio, UI/UX, Front end, Wordpress, Web-design
- Re:coded house for space
- Entrepreneurship programs as a track
- Partnerships in the UN PS, Techstars, no hiring partners
- Capstone, project based vs lectures
- Public funded GIZ, UN
- Refugee focus, inclusive

Models: with entrepreneurship & self-employment



Sky Gaza Geeks

- Palestine
- Non-profit
- Three separate programs for founders (entrepreneurship), for freelancers (employability skills), and software engineers
- Supported by a grant from Google
- Large # of partners: Stripe, Bayt, Github, Salesforce, AWS as well as public
- Intensive setup
- West oriented skills: Node JS, React JS

Models: with entrepreneurship & self-employment



Moringa school

- Kenya
- Registered as TVET
- 3000 graduates
- Minimum high school, no engineering degree
- Mixed programs: not engineering bootcamp but pick and choose programmes
- 80 hiring partners, mostly Kenya

Lesson #1: Curriculum & tools must depend on the employment geography & market



"The curriculum is key. Python and cloud technology, virtual services, is in huge demand in the world. But there are a lot of competition.

Somalia is competing with other African countries."

HUGH BOSELY, RBK



"Part of our training, which has worked very well, is that the students will work for free for international companies, as part of the training. In this way, they learn how to deal with clients. We experienced that many didn't have a lot of experience with teamwork from before."

ZAHRA SHAH, SKY GAZA GEEKS & RE:CODED



"A junior SWIFT developer will make the same as a mid/senior wordpress developer. You can compete with rural India or Andela. Do you want to train 1000 who can earn 20 dollars an hour internationally, or 50 who can earn 50 dollar an hour? Centre of excellence that can grow out. Quality over quantity."

CHRIS PRUIJSEN, EX HACK REACTOR

Lesson #2: Keep focus, entrepreneurship (self-employment) vs waged employment



"Realistically we will not have the
"unicorn" coming out of post-conflict, but
that is not the point. It is still in
accelerator, learning process. It doesn't
mean you will have million dollar
start-ups from it."

ZAHRA SHAH, RE:CODED & SKY GAZA GEEKS



"Entrepreneurship versus employment.
The assumption that everyone wants to be an entrepreneur is wrong. Because the drivers for entrepreneurship, is often lack of employment."

STANLEY MWANGI, ASPEN INSTITUTE



"Entrepreneurship is an outcome, but it is also a mechanism of learning. Especially for easy stage learning."

MUNIR NABTI, PITCHWORTHY

Lesson #3: Don't forget the soft skills fit to professional developers



"We have taken a different approach than other coding academies. Our programme is also about developing character. It is important. The hiring partners want people that are professional, that can work well with others."

HUGH BOSELY, RBK



"If you don't have much working experience, for example if you don't have worked in an office before, it is also very important to learn "soft skills". "

ZAHRA SHAH, RE:CODED & SKY GAZA GEEKS



"People needs to have exposure to different skills depending on pathway (eg. employability & self-employment). It is important to have access to different kind of learning."

MUNIR NABTI, PITCHWORTHY

Lesson #4: Design based on your targeting & inclusion strategies



"What we have experienced is that after the programmes finished, a lot of the graduates didn't really get into developing, more like trainers, project managers, it depends on the type of skills, and the type of job."

ZAHRA SHAH, RE:CODED & SKY GAZA GEEKS



"Understanding the profile of the students is important, and the level of education. There is a broad spectrum of digital jobs outside of just an engineer."

MUNIR NABTI, PITCHWORTHY

Lesson #5: Institutionalizing tools & Business modelling



- Focus investing in Center of Excellence
- Investing in local ecosystem: hubs
- Strong Government Engagement

 Ministry of Youth, Education, Labor, Social Affairs, Trade,
 Information & Technology
- Focus on business model: sustainable, profitable

Lesson #6: Networking investment & connecting Local to Regional & Global



- Non-boundary employability
- Cross-border Initiatives
 Somalis in Kenya, Ethiopia, Djibouti
- Learning from Other countries

 Iraq, Palestine, Kenya, Tunisia

Lesson #7: Alignment with other Youth Programming



- Mapping and connecting to other employment & livelihood programs in the UN system
- Focus on value add

 UNDP's work on digital skills & Economy, SDG integrator

Co-design process: Canvas exercise for the Future Ready 2.0



- 1. Our resources
- What do we have?



- 2. Key partners
- Who do we need?



- 3. Key activities
- What do we offer?



- 4. Segments & Customers
- Who will pay?



- 5. Channels
- How do we find them?



- 6. Value Proposition
- Why we are fit? How we are different?



- 7. Cost Structure
- What we need to build to start?



- 8. Revenue structure
- How to make it sustainable?

Key resources



- Youth high unemployment rates
 Youngest and Dynamic
- Low \$ for global "value for money" skill

 Low salaries comparatively to the global economy
- Momentum & Policies in place
 Focus on digital economy

Key partners



- Hubs: space, connectivity, training
 In place, and in process for more locations
- Curriculum partner
 Flatiron, Hack Reactor, General Assembly, Samaschool, Social Media
- Large technology partners
 Curriculum, Training support, Exposure, Corporate programs, Accelerators, Infrastructure
- Targeting & Recruiting & Vetting Academia, IOM/UNHCR & NGOs
- Employment/Hiring partners: local & global Important in case of the model for waged employment

Key activities



Advanced: full stack engineers for waged employment

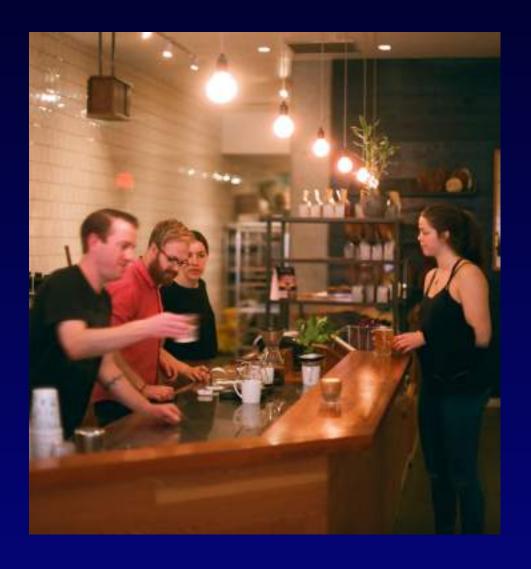
Advanced training and employability

- Waged jobs & Gig economy: soft skills & employability Capacity for using platforms, project-based work in Somalia and global
- Orange economy: creative sector Jobs in media, creative sector, and content
- Foundational Digital skills

 Working in data management, project and office work
- Entrepreneurship

 For the self-employment

Key segments & customers



- Somalia market: key service industries Telecoms, Banking, Retail, NGOs
- Somalia SME sector

 Agro, Community organizations
- Orange economy: creative sector
 Media, TV, Advertising, NGO
- Regional: Arab & African companies
 Related businesses with high employing potential: Turkey, GCC, Kenya tech companies
- Global tech startups, companies
 Potential in project-based jobs for USA, EU
- Data & Outsourcing global
 Lower level digital in data processing

Key channels



- Hiring/Employment partners
 Somalia key businesses & associations for SMEs
- Hiring/Employment partners
 Global, Kenya, Turkey, GCC
- PlatformsUpwork
- Funding for self employment & Entrepreneurship

Banks, Islamic Finance programs

Value proposition



- Talent "fit for purpose"

 Trained based on market demand/hiring partners in Somalia
- Talent "value for money"
 Trained on global demand stack, operates at lower \$ (agency model)
- Self employment & Entrepreneurship
 Building self-sustained entrepreneurship ecosystem in Somalia

Cost structure



- Training & Capacity Building
 Ideally subsidized for curriculum, but with \$ to support TOT
- Space/Connectivity/Equipment
 Ideally subsidized, but with the support of local hubs, incubators on the set up
- Partnership Development & Agency setup
 Continuous business development for hiring partners/projects
- Entrepreneurship funds
 Support with funds the entrepreneurship ideas
- Platform for hiring/capstones
 Potential idea for match platform for local market

Revenue model



- First month fee hiring partners

 Model where companies pay for tailored trained talent
- Public funding
 Subsidized through bilateral traditional funds
- Corporate programs/Philanthropy of businesses

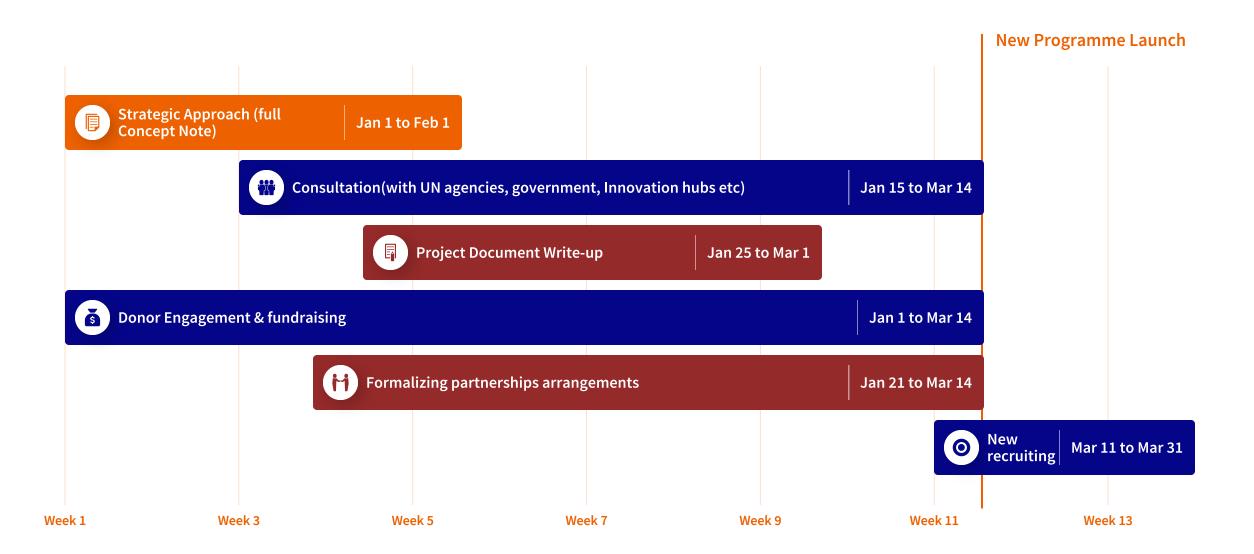
Including getting support for long term programs from engaged businesses

Students/Trainees fees
 Students pay from received employment

- 1 Goal #1 Strategy "Skills to employment"
- 2 Goal #2 Fundraise & Partner
- 3 Big Goal # Launch Future Ready



What's Next: Road-Map



Thoughts? Questions?

Lets open up to Brainstorming

