

Technology and Business in Africa – What's the Next Big Thing?

Developing Africa's ICT Sector









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The importance in supporting ICT Entrepreneurship in Africa

ICT in Developing Countries

- In developing countries, for every 10 percentage point increase in mobile penetration, there is an increase in economic growth of 0.8 percentage points
- In developing countries, For every 10 percentage point increase in internet penetration, there is a growth effect of 1.1 percentage points
- Household incomes are expected to increase with a 5% compound annual growth rate from 2008-2020

Entrepreneurship in Africa

- At an inflection point where youths are taking risks and running start-ups versus going into traditional employment sectors
- Formal sector job growth is not rising fast enough to absorb African youths
- Diversifying beyond on natural resource revenues to a successful 21st century Africa
- Critical to development and retention of skills in the Continent, and for development sustainability



Entrepreneurial Obstacles Facing SMEs

Key issues

Access to networks

Access to technical skills

Access to business skills

Access to finance

Access to markets

Supportive business environment





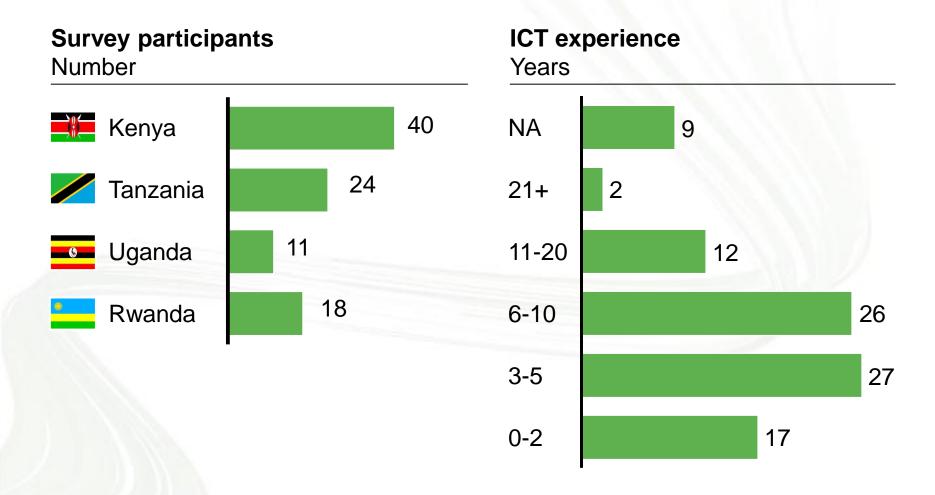


To address this situation, InfoDev, Hivos, and UKAid jointly developed the East Africa ICT SME Strengthening Project

- To gather feedback from entrepreneurs in the region
- Identify best practices and potential partners in East Africa
- Flag gaps in delivery and impact and design a set of interventions to address these areas

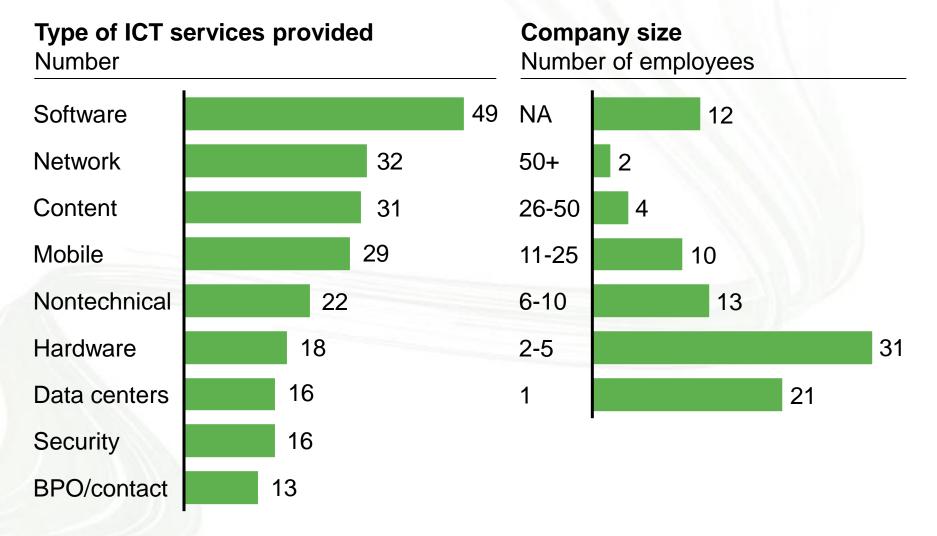


Profile of the ICT entrepreneur participants





Profile of the ICT entrepreneur participants





Feedback sessions: Key takeaways (1/2)

Issues

Access to business skills

Participant comments

- "We're geeks. We need people who can market and communicate."
- "At university we learned how to code, but our professors don't know other things we need in the real world."

Access to financial resources

- "The banks don't understand my [technology business] so they will not lend to me."
- "I know I need some money, but I don't know exactly how much."

Access to markets

- "The government and the big companies would rather outsource to foreign companies than have locals do the work."
- "There is no place for people to find my work."

Common themes

- Need to partner with business professionals
- Need practical advice
- Need connections to funders
- Need mentors to review business plans



Feedback sessions: Key takeaways (2/2)

Issues

Access to technical skills

Participant comments

"The schools teach computer science using theory

 on the chalkboard and from books – we don't get practice."

Access to business networks

- "These networking opportunities are priceless."
- "If we worked together we could have capacity for big jobs."
- "I need to talk to someone who has done it before."
- "We need some mentors ... techie or non-techie."
- "I wouldn't tell someone my idea, because they might steal it."

Supportive business environment

 "There is no legal protection for intellectual property."

Common themes

- Need forum for discussing and publicizing ideas
- Need to develop trust to encourage idea sharing
- Need intermediaries for rating, referring, and validating products and services



East Africa ICT Vision

Vision

An East Africa with a robust and dynamic ICT sector that creates jobs, companies, and innovation that benefit all sectors of society and are globally competitive

Realizing this vision will require a coordinated program of interventions and the cooperation of organizations across the region.

Required Interventions

- Develop a Fully Connected Network
- Launch Skills 2.0
- Support Innovators
- Enable Job Creators
- Upgrade the Business Environment

Activities facilitated by a Program
Management Office that will coordinate
common tasks and drive stakeholder
alignment (e.g., community databases,
marketing, knowledge sharing)









Session feedback (1/2)

Consistent feedback in regular type; Country/segment specific feedback in italics

Vision

Feedback

- · Overall agreement with vision
- Considerable opinion that benefits for ICT sector to impact East African broadly, not strictly individuals and organizations directly involved in industry

Quotes

- "Could we add something about ICT 4D?"
- "We need to do something in ICT for the villages."
- "This effort leeds to benefit all of [East Africa] including the poor."

Interventions



- Broad consensus across countries on importance of physical space and networks linked to that space
- iHub was commonly cited example as bestin-region currently
- Importance placed on independence of space and network from institutional agendas
- Mentors will need training and clear responsibilities as well
- Some existing networks are too broad for ICT SMEs (e.g., RICTA?)

- "We have good networks, they just need support to reach more people and do more physical meetings. Everything cannot be done in a virtual network."
- "Let's not duplicate our [existing] networks, but build capabilities within them"
- "We are funding the meetings and talks out of our own pockets; knowing there was a solid source of funding would increase the perception of our networks"

Skills 2.0

- Bias to partner with corporations for training and internships, with access to latest technologies; however more meaningful opportunities to learn must be developed
- Create training opportunities in the rural areas as well
- Push back in Rwanda and Tanzania on whether academic institutions are right institutions to lead "practical" trainings

- "Universities need to focus on hands-on."
- "Colleges are academic places and not the right places to learn the practical [side of development]."
- "Internships are great, but give us the opportunity to practice on real problems; not made up items."
- "Universities do not know the latest software, they are teaching ones that are very out of date."









Session feedback (2/2)

Consistent feedback in regular type; Country/segment specific feedback in italics

Interventions

Innovator support (Small enterprises)

Feedback

- Consistent feedback that financial community does not understand ICT industry business models, funding needs, and risk profile, so seed capital and working capital availability are thin at best
- Mentorship and mix of business network, business skill and financing was attractive to participants
- Chamas (indigenous savings co-ops)
 mentioned as a potential indigenous
 solution; but similar risk and industry gaps
 may limit impact

Quotes

- "There is money for the local restaurant and for the established business, but not for mine"
- "The banks don't understand ICT at all"
- "It took us 9 months to get our financing from the bank"
- · "We need to educate the bankers and investors."
- "Chamas could be an answer, why don't we look into that?"

- Job creator support (medium enterprises)
- Positive response, if a bit out of scope for some session participants
- "We need the support to get to medium stage companies and also to be part of their supply chains"

- Business environment
- Positive, though acknowledgement that results will take time.
- Address specific ICT issues including domain name squatting and short-code allocation
- "Getting an SMS short code is very hard for a small business and it takes very long. It creates a major delay to test and launch a product."



Business

environment







on new efforts will be improving in the

early 2011

Potential partners - by countries as suggested by workshop participants

Interventions Kenya Rwanda iHub - already has physical space and No dominant physical space or network Fully connected critical mass of activity; structure required to although KIST was an opportunity network formally build out the networks Government/Rwanda Development Board Tandaa – as a network supportive of private organization creating · Other organizations mentioned included a space USIU. Strathmore 2 Strathmore Entreprise Development RDB engaged on in setting standards for training and providing funds for training Programme Skills 2.0 · University of Nairobi (although current participation is low) Jomo Kenyatta University Academic institutions, both internal (KIST), Kenya ICT Board and external (e.g., Carnegie Mellon) Chama as a partner – though no specific Business plan competitions; RDB organizing Innovator Chama or Chama network was mentioned: business skills retreat support (Small Institute of Electrical and Electronics enterprises) Engineers; KICTANet Government – freedom of information efforts Government procurement managers Job creator Large multinational IT firms are early but expected to yield results in support (Medium terms of content (e.g., GIS); donor/ enterprises) government assistance with procurement 5 Rwanda Development Board – marketing Kenya ICT Board







Chamber of Commerce, and Tanzania

Investment Authority



Potential partners – by countries as suggested by workshop participants

Tanzania Interventions Uganda Business network - Enablis, eThinkTank (as Physical space: Hive CoLab as a physical Fully connected space, with additional resourcing to improve organized by some session participants), network British Council, Costech, Tanzania attendance Marketing Association iNetwork • Physical space: no clear dominant space; Linux User Group – fairly active, if specific group sought independent leadership, e.g., topic area not academic and government affiliated 2 University Computer Center – considered Makerere University; Kampala International good at building hands on skills University: Uganda Communications Skills 2.0 Business skills – potential partners include Commission Universal Service Fund British Council, University of Dar es Salaam Entrepreneurship Center, Tanzania **Entrepreneur Forum** 3 • infoDev incubator coming on-line in · Hive Colab, Makerere University National Innovator Software Incubation Center Q1 2011 support • No clear financing partners – a lot of "vulture capital" currently • Government procurement managers; large Not discussed in detail in this session. Job creator multinational IT firms support 5 Not discussed in detail in this session Advocacy partners include National **Business** Business Council, Costech, Tanzania environment Private Business Council, Tanzania









1 Connect Entrepreneurs: Develop a networked community of trust that collaborates as well as competes, and provides its members advice, mentoring, financing, skills, and representation

Activities

- a. Support the establishment of SMEfocused ICT business associations, networks, and clubs
- b. Support the establishment of spaces that encourage convening and collaboration
- c. Develop and disseminate case studies and how-to guides
- d. Introduce angel investing and provide angels low-risk opportunities to invest

- a. Foster a business culture that breeds innovation and collaboration
- b. Create a shared knowledge base
- c. Cultivate sustainable angel investor network









What might iHub version 2.0 look like?

Programs

Mentorship program

- On-going, structured program with assigned mentors and mentees at manageable ratios (e.g., 1:5)
- Clear responsibilities and time commitments for both groups
- Defined business roadmap to drive progress and milestone achievement

Active feedback from the community

 Periodic surveys and focus groups to all stakeholder categories to ensure events, programming and skills development meets expectations

Creative collaborator matching

- Links to other professional and academic networks to provide a full compliment of business and technical skills (e.g., accountants, lawyers, marketing professionals)
- Also links to potential collaborators outside of specific geography (e.g., Afrilabs as a connector)

Knowledge warehouse

- Key data sources required to every early tech enterprise
 - Business start-up guide, tailored at the country or locality level
 - Access to basic data sources to complete business plans (e.g., census)

Strong community norms and mechanisms

- Clear and communicated code of conduct
- Mechanisms to resolve disputes within the community









2 Launch Skills 2.0: Cooperate with academic and training institutions to ensure that young East Africans have the full range of skills they need to be Ready for Business

Activities

- a. Support upgrading university computer science curricula: incorporate hands-on experiential learning; include exposure to business concepts; teach project management skills
- b. Provide broad access to industry standard training and certification programs
- c. Provide business skills training and business plan development support

- a. Create business savvy technologists
- b. Produce university computer science graduates with upgraded skills
- c. Fast-track the proliferation of standard certifications (Make MCM, MCITP, CCIE, CCDE, etc. as common as CPA and CA)









3 Support Innovators: Support the start-up and growth of companies that create innovative solutions to business and development challenges in the region and beyond

Activities

- a. Provide business plan development assistance
- b. Provide capacity building support and training targeted to meet the needs of the business
- c. Provide donor subsidized funding for startups and other companies requiring less than \$100k

- a. Increase the number of successful start-ups
- b. Increase the number of successful innovative firms









4 Enable Job Creators: Support the development of stable service companies that generate employment opportunities for large numbers of knowledge workers

Participants

Entrepreneurs, small companies

Activities

- a. Provide capacity building support and training targeted to meet the needs of government clients
- b. Provide capacity building support and training targeted to meet the needs of the domestic private sector
- c. Provide business development support
- d. Develop financing tools to support companies pursuing existing markets
- e. Support the BPO/CC segment in pursuing international clients

- a. Increase the number of local companies that implement government IT initiatives
- b. Increase the number of local BPO/CC and system implementation companies that serve the domestic private sector
- c. Become an offshoring destination of choice









5 Upgrade the Business Environment: Improve business conditions in tangible ways that enable citizens and international investors to build strong ICT businesses in the region

Activities

- a. Streamline business registration and make the process available online
- b. Develop national and regional software, security and other standards
- c. Address policy, regulatory, and administrative barriers to ICT businesses (e.g. SMS short code allocation)
- d. Support tax holidays for new businesses

- a. Make starting and registering a business simple and speedy
- b. Enhance industry and regional credibility and transparency
- c. Support business startups and small enterprises