# Digital Competencies to benefit from existing and emerging technologies with focus on gender and youth dimension

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### Introduction

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# "We grow because every day we endeavor to know"









## State of Internet: Start-ups in Africa

- Africa boasts of 442 active tech hubs in the continent (GSMA)
- Since 2016, the number of active tech hubs across Africa has grown by over 50%: from 314 in 2016. (GSMA)
- Startup venture funding jumped more than 50% in Africa
- Mobile and online consumer services drew most significant interest pulling 42% of total investment (\$236 million)









### State of Internet: Women and Youth

- Sub-Saharan Africa has shown highest number of female startup entrepreneurs relative to established businesses at 11 percent. (GEM)
- Women's entrepreneurial activity is up 10%, closing the gender gap by 5% since 2014 (GEM)
- Gender gap (ratio of women to men participating in entrepreneurship) narrowed by 5%. (GEM)







## Challenges of startups in "Africa" Why most have failed...

- Trial and error modus operandi: This method of starting, means less research is done about a startup therefore there are many hiccups along the way
- Over ambition and over diversification, focus on one innovation is better
- Products that have no market need, create a product that the market just doesn't want, poor market timing
- Poor marketing and product launch. Pivoting launch of a product, do some user testing, find out it's not the right product/market fit, and you pivot to something else
- Lack finances and/or high recurrent startup costs
- Failed geographical expansion
- Product pricing, if too expensive many will look for another alternative
- Disharmony among investors and co-founders, mostly due to a poor legal framework during startup foundation/ poor team selection and make-up
- Close to 20% get outcompeted is the reason why some startups fail.







## Benefit from existing and emerging tech

- Technology moves fast, most times even before the global south catches up.
- What can developing countries do?
  - Stop overthinking existing technologies
  - Focus at leapfrogging to the newest technologies for example 4g
  - Build better research facilities with actual feedback
  - Have accountable and return on investment (ROI) oriented planning
  - Legislate flexible yet protective laws that can help to catalyze growth
  - Invest in youth and women from the grassroots and formative stages, #TeenPreneurs should be the new campaign
  - Prepare exchange programs
  - Develop competition based innovation fairs that reward creativity and research
  - Focus on locally based solutions to build market





### Potential Technologies that can leap-frog Africa

Some of the technologies that developing countries could start exploring to leap-from include;

- Blockchain technology, still not implemented but could be cautiously explored
- Big Data research evaluation through that could help in advancing artificial intelligence (AI), robotics, Machine learning for agriculture, energy, health and other fields
- More micro-satelites into space to increase locally fronted exploration
- Drones for use in conservation, agriculture and research
- Green energy sources that will reduce the need for environmentally degrading energy sources







## Potential risks of technological advances

- **Technology moves fast;** and with it comes new threats that must be checked.
- What are some of the <u>potential risks of tech</u> advancement
  - Privacy violations as recently seen on the Cambridge Analytica case of phsycographics
  - Militarization of Artificial intelligence and machine learning
  - Synthetic biology or facial recognition software, can be repurposed for harmful outcomes such as surveillance
  - Information overload
  - Organizations having a fully Machine Based Workforce
  - The Over-Reliance On Technology to work or solve all human problems





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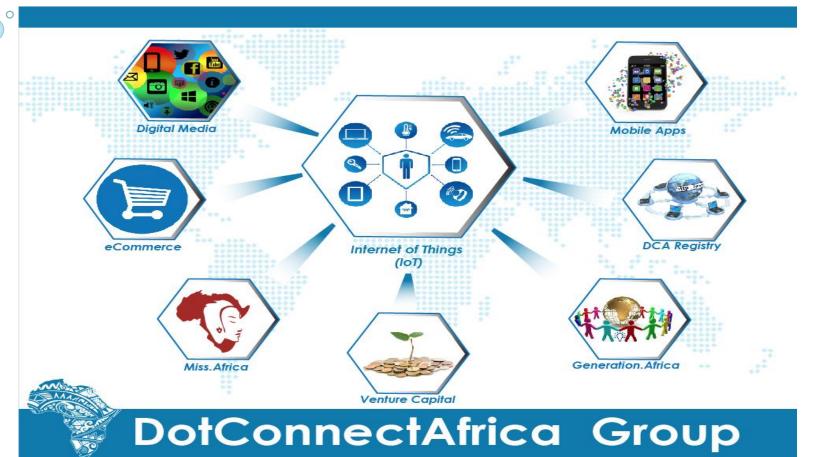




## DCA Digital Academy advancing Iot in Africa through partnerships

- DCA Trust synergies with Startups, Partners and Mentors
- **Start ups:** seeks to partner institutions to provide a platform for startups to launch to the market and grow their businesses.
- Partners/Sponsors: seeks and connects with venture capital funds, partners and angel funding groups with high potential and promising startups that Miss.Africa has vetted and partnered with to make them scalable and revenue generating:
- Mentors: Mentors are a great resource and a driving force behind successful startups and DCA Group through Miss. Africa build relationships between mentors and founders and utilize talents to the fullest. Miss. Africa connects and enables synergy between founders and mentors and a work-space. Are you a mentor who wants to partner?

## DotConnectAfrica Group Enables learning through IoT Application



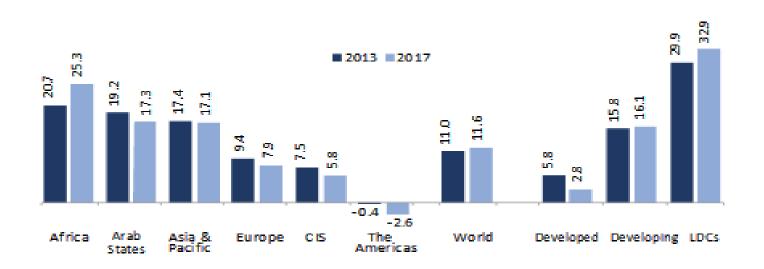
**DCA Group Tech activities** 





## The Great Digital Gender Divide

## Internet user gender gap (%), 2013 and 2017\*



Source: ITU.

Note: \* Estimates. The gender gap represents the difference between the Internet user penetration rates for males and females relative to the Internet user penetration rate for males, expressed as a percentage. **CIS** refers to the Commonwealth of Independent States.







## Bridging the Great Digital Gender Divide to promote Sustainable Education

- Addressing the digital gender divide is critical to realizing the significant potential benefits that the Internet can bring for women & the broader economy.
- In LDCs, only one out of seven women is using the Internet compared with one out of five men.
- Despite worldwide efforts, the global Internet user gender gap grew from 11% in 2013 to 12% in 2016, with the estimated gap highest in Least Developed Countries (LDCs) (31%) and Africa (23%).
- Training of more women to join development of education for sustainable development



## DCA Empowers women in tech through IoT (Miss.Africa Digital)

☐ Through the annual Miss.Africa Seed funding project DCA attracts young girls & women to the Internet platform by involving them in complementary gender development initiatives that improve their lives.







- ☐ Hundreds of Women have so far benefited directly by receiving Mobile App Development training from the Miss.Africa Seed Fund Winners.
- ☐ The program expects the number to increase by the end of the year when the 2016/17 cohort graduate.





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United Nations Conference on Trade and Development

Prosperity for All

### **Partnerships at DCA Academy**









## Achieving Startup growth in Africa through DCA Digital Academy

- DCA Digital Academy provides training on various topics, all related to the Internet so as to increase Internet literacy and promote lifelong learning in Africa.
- The Academy provides the tools & skills to foster entrepreneurships & also connecting youth and women to innovation highways.
- Members get to be given the opportunity to nurture their skills and talents through continuous assessment and awarding of certificates.
- DCA Academy trains more people to develop local solutions that will help to enhance Sustainable
   Development in cities and communities





### Recommendations to the conference

- Governments should urgently design an adaptive system to enable R&D in technology and STEM.
- Start-ups need to stridently move from talking the blueprint to tangibles in the tech space
- The global south has the best opportunities to leap-frog in the digital economy instead of reinventing the wheel. We can lead in Blockchain, Artificial Intelligence, Machine learning and Big Data.
- Next generation tech-preneurship will be led by #Teenpreneurs, youth who have it in their DNA.
- We need to address the digital gender divide in order to fully bridge the economic divide. The global statistics still reflect massively low numbers on women engagement.



### REFERENCES

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- GEM 2016/2017 Women's Entrepreneurship
   Report
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