



DataHack4FI: Driving data science skills development in Africa

February 2020

The DataHack for Financial Inclusion (DataHack4FI) innovation competition encourages collaboration and skills development to promote the use of data and data analytics to solve financial and economic inclusion challenges, thereby extending valuable financial services to the underserved. The initiative seeks to create communities of innovation by convening emerging tech companies, data enthusiasts, innovation hubs, development partners and FSPs to stimulate the use of data for financial inclusion.

Despite the increasing availability of data and a growing appreciation for the importance of data-driven product design, there is a practical disconnect between the decisions being made for financial inclusion in Africa and the available data. This gap hinders the extent to which financial products and services meet the needs of excluded and underserved people. With data science still emerging as a career path for young Africans, a shortage of data science human capital is a key contributor to the disconnect. As financial institutions begin to recognise the power of data and the need to employ a greater level of data analytics in the design of product innovations, capable African data scientists are required to meet this demand.

Season 3 of DataHack4FI sought to contribute to data science skills development and the empowerment of African youths in a field that is increasingly providing opportunities for career advancement. By partnering with Microsoft and Liquid Telecom, aspiring data scientists from across Africa were given the opportunity to enrol for the Microsoft Professional Program (MSPP) in Data Science, an internationally accredited certification, via Liquid Telecom’s *21C Skills* digital education platform. Experienced data scientists were on hand to provide digital and in-person mentorship to the candidates as they worked to complete the course requirements.

Having successfully completed 10 theoretical data science modules and the CAPSTONE practical use-case project, **108 African data science enthusiasts were awarded the Official Microsoft Certification.**

374 Enrollments | **108** Completions



Completion



Males



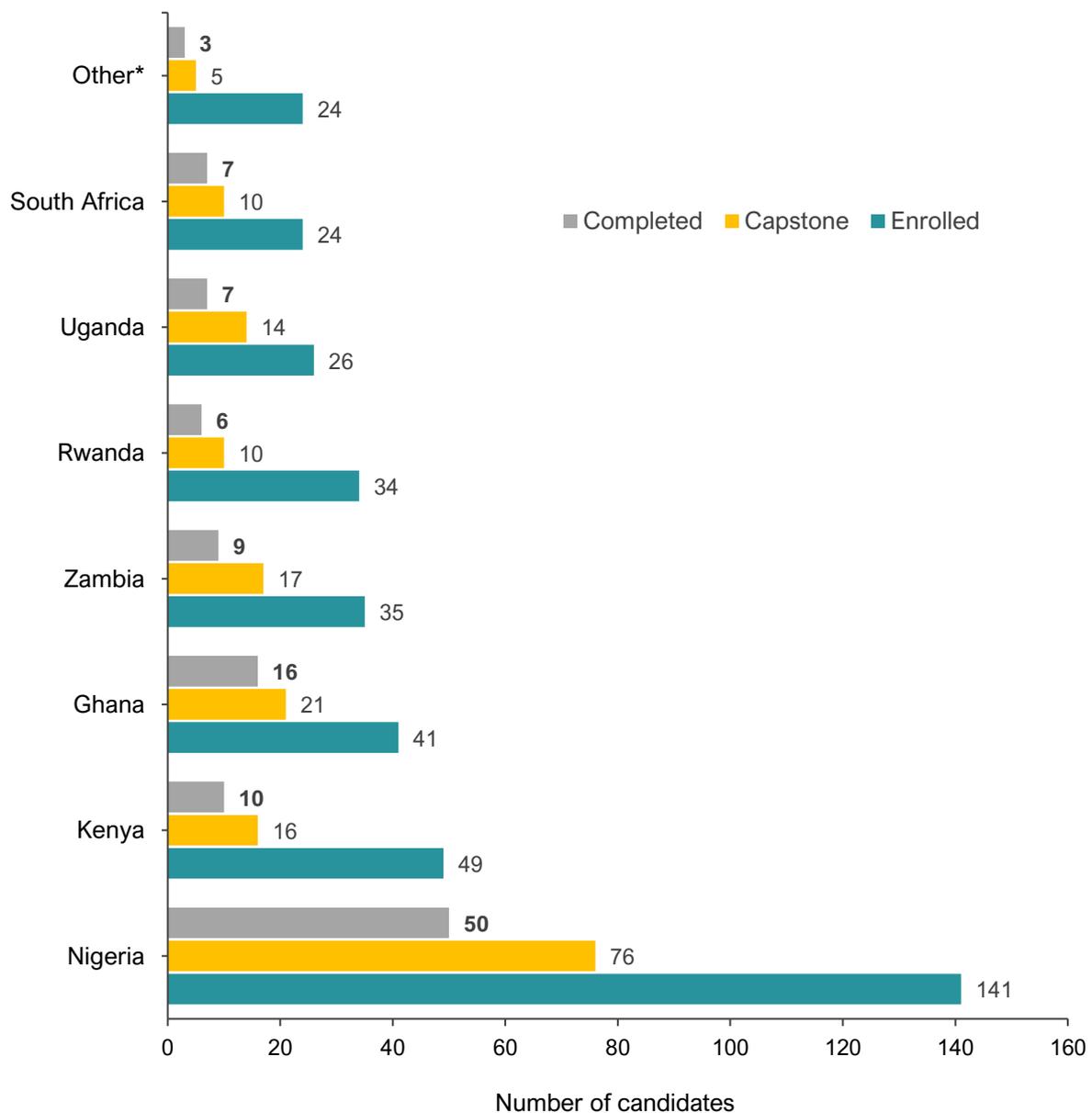
Females



African youth

DataHack4FI's data enthusiasts– in numbers:

- Total number of accepted applications (DataHack4FI data enthusiast applications): **619**
- Number of user registrations (signed up at 21cskills.africa): **441**
- Number of user course enrolments (active users): **374**
- Number of users qualifying for CAPSTONE (10 prerequisite modules): **169** (45% of enrolments)
- Number of users who successfully completed the MSPP in Data Science: **108** (29% of enrolments)



*Other: Zimbabwe (2), Mozambique (1)

A four-year study by HarvardX and MITx established that the average completion rate for massive open online courses (MOOCs) is limited to 5.5%¹. The DataHack4FI initiative was able to achieve a completion rate of **29% (108 certifications / 374 candidates)**, more than 5 times the expected success rate. This was accomplished by fostering a learning environment, both offline and online, where candidates could engage data science experts and their peers, as they worked towards achieving the Microsoft Professional Program in Data Science:

- *The primary form of mentorship was digital, where candidates received support from two data science experts through a dedicated Slack messaging channel – which was able to attract 100-200 active users per week.*
- *In-person study groups were organised in each of the 7 participating DataHack4FI countries. These sessions presented candidates with an opportunity to directly engage an experienced data scientist while completing course material alongside their peers.*
- *The DataHack4FI Community Facebook group offered candidates an additional portal to post course-relevant questions, engage their peers as well as experienced data scientists.*

As the data science landscape in Africa matures, where organisations and institutions are gradually realising the value of adopting evidence-based business practices, there is a clear need for capable African data scientists who understand the context in which business challenges will need to be solved. By driving data science skills development and data-driven thinking throughout Africa, the DataHack4FI innovation competition is enabling the design of African solutions to African problems.

For more information visit: www.datahack4fi.org



¹ Chuang, Isaac and Ho, Andrew, HarvardX and MITx: Four Years of Open Online Courses - Fall 2012-Summer 2016 (December 23, 2016).

How to find us

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