



# DataHack4FI Season 3

Concept document

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Advancing Financial Inclusion





## Table of Contents

1. Background and rationale .....	2
2. Objectives.....	4
3. Target audience .....	4
4. Methodology and project plan .....	6
5. Communication strategy .....	9
6. Work allocation and institutional arrangement .....	11
7. Appendices.....	13

## 1. Background and rationale

DataHack for Financial Inclusion (DataHack4FI) is an innovation competition and an initiative of insight2impact (i2i). It encourages collaboration and skills development to promote the use of data and data analytics to solve financial 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 (Figure 1). DataHack4FI focuses on the use of alternative data sources, big data, small data, and new data trends that are traditionally ignored by FSPs but that start-ups can use to design user-centered financial services and products. Ultimately, the competition aims to broker partnerships among key stakeholders which facilitate the design and release of financial inclusion solutions.

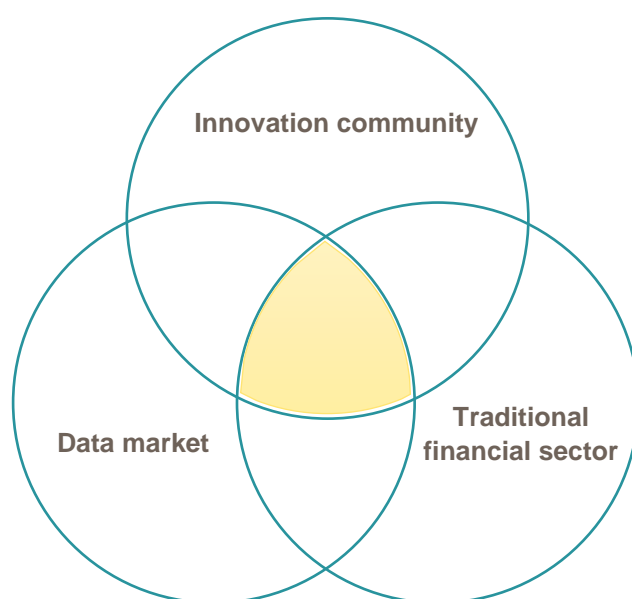


Figure 1: Data-driven financial services innovation ecosystem

The DataHack4FI targets young innovators and aspiring data scientists from a number of focus countries across Africa. The competition runs over multiple stages where teams compete to develop innovative solutions to financial inclusion challenges. The competition serves as a platform for participating teams to showcase their work to potential investors and partners, while vying for the DataHack4FI winner's prize (technical and financial support toward continued solution development). Two seasons of the competition have been completed to date: Season 1 was completed on 9 May 2017 and involved 126 participants (58 teams) – winner: MobiTicket. Season 2 included 185 participants (38 teams) and was concluded on 7 May 2018 – winner: WazInsure.

## Season 2 Overview

Building on the networks and experience garnered from Season 1, DataHack4FI Season 2 took place in six African countries (Ghana, Kenya, Rwanda, Tanzania, Uganda and Zambia) from January to May 2018. In Season 2, established start-ups were paired with data science fellows to enhance the use of data in solution design. In turn, the data science fellows received mentorship from data science experts. Participating teams developed their solutions while accessing a number of skills development and mentorship opportunities during the course of the competition. Each team's solution was subsequently judged by a panel of experts at the in-country finals, with the winning teams from each target country invited to showcase their prototype at the Grand Finale in Kigali, Rwanda.

A number of key learning outcomes were highlighted during the course of Season 2. These outcomes form the basis on which Season 3 seeks to widen the scope of DataHack4FI and enhance the impact of the competition for all stakeholders:

- Competition requirements need to be more clearly defined and articulated in order to attract suitable fintechs, and judging criteria need to provide clearer guidelines for solution design during DataHack4FI.
- Fintechs are willing to explore their data strategy and are open to learning about their own data.
- The data science fellow selection and pre-competition preparation must be improved to maximize their value to the participating fintechs by enhancing their impact on data-driven decision-making.
- DataHack4FI in-country competition models must be more consistently applied across target countries to facilitate a level playing field for participating teams.
- Participating fintechs should receive additional mentorship to further their product business model and management development.
- Networking and collaboration opportunities need to be expanded to promote Pan-African interactions.
- Future seasons of DataHack4FI should have a greater focus on impacting financial inclusion by facilitating the design and release of scalable solutions to financial inclusion challenges, while exposing teams to additional partnership/funding opportunities.
- The innovation hubs/host organizations play a critical role in implementing DataHack4FI and supporting participating teams throughout the competition duration.
- FSPs do not engage naturally or easily with fintechs unless they have made an internal strategic decision to engage start-ups in an attempt to further their financial service offerings.

## 2. Objectives

Season 3 of DataHack4FI seeks to create opportunities for data enthusiasts and emerging tech companies, deepen the data for the financial services ecosystem and advance financial inclusion. We aim to achieve these objectives by creating a neutral convening platform, providing mentorship and skills development training, and providing technical and financial support to emerging tech companies.

- Skills development
  - To provide data science and entrepreneurial skills development opportunities for participating data enthusiasts and emerging tech companies.
- Networking and collaboration
  - To create a convening platform for young entrepreneurs, aspiring data scientists, innovators, public and private-sector stakeholders to promote Pan-African collaboration around the advancement of financial inclusion
  - To build new, and strengthen existing, networks that allow for the empowerment of youth and women to design scalable solutions
- Data-driven decision-making
  - To promote the use of data to improve financial inclusion through evidence-based, client-centric solution design
  - To mobilize the data market by leveraging interest and skills of stakeholders to develop active and impactful innovation ecosystems that promote data-driven decision-making
- Financial inclusion (through a combination of the above objectives)
  - To catalyze new data-driven solutions that positively impact society by serving the financially and economically excluded and underserved

## 3. Target audience

Season 3 sets out to build upon the previous editions of DataHack4FI, and it will target emerging tech companies, aspiring data enthusiasts, and other key stakeholders from the following countries:

- Nigeria (New)
- South Africa (New)
- Ghana
- Kenya
- Rwanda
- Uganda

- Zambia

### Participant outline and competition requirements (key definitions)

- Emerging tech company: An emerging enterprise whose purpose is to bring innovative technology products or services to market. These enterprises aim to develop viable businesses by delivering products or services that meet a marketplace need that relates to financial inclusion.

*Season 3 requirements:*

- (1) *Must be a registered, post-revenue tech company*
- (2) *Must have a product currently in the market*
- (3) *Must have generated data that provides meaningful insight and that enables the development of new or improved products/services aimed at advancing financial inclusion*

- Data enthusiast: An individual with an interest in pursuing a career in data science, who strives to continually develop their understanding of data, innovative data analytics, and the role of data in decision-making.

*Season 3 requirements:*

- (1) *16 to 35 years old*
- (2) *Currently studying towards, or have completed, a bachelor's degree*  
*(Subjects: data science, mathematics, statistics, computer science, IT, engineering, finance, + quantitative other)*

- Problem statement: A clear but succinct description of the financial inclusion-related business challenge an emerging tech company intends to address and a proposed solution to this problem. A problem statement should answer: what the problem is, who the problem affects, where the problem is occurring, when the problem occurs and why it is essential to solve.

- Solution: A service or product that addresses a particular financial inclusion-related problem statement.

*Season 3 requirements:*

- (1) *Problem statement must address a financial inclusion challenge*
- (2) *Solution must represent a newly developed product/service or an enhancement of existing offerings*
- (3) *Proposed solution must be viable and must demonstrate potential for release to market*

## 4. Methodology and project plan

### 4.1. What's new in Season 3

- Two-stage competition – Previous seasons of DataHack4FI have attempted to impact financial inclusion; however, the extent to which this objective has been achieved remains limited. Season 3 strives to enhance the DataHack4FI's impact on financial inclusion by adopting a two-stage competition format.
  - Stage 1 will include a large pool of teams who will compete for limited places in Stage 2 of the competition. Teams to progress to the final stage will be selected during the in-country finals. The key objective of Stage 1 is to identify solutions with the greatest potential to impact financial inclusion and the maximum likelihood of release to market.
  - Stage 2 will include a limited number of teams whose solutions show the greatest potential to impact financial inclusion. The objective of Stage 2 is for the teams to showcase their prototype solutions to the DataHack4FI judges and extensive investor networks at the Grand Finale. Teams that progress to Stage 2 will receive invaluable exposure to Pan-African innovation networks and possible equity/partnership offers.
- Pre-selection of data enthusiasts – Data enthusiasts who apply for Season 3 will undergo a more rigorous selection process prior to pairing with emerging tech companies. The final pool of data enthusiasts will be identified following a three-month data science mentorship program. In this manner, we aim to build confidence and credibility in the qualifying data enthusiasts to ensure participating tech companies find value in engaging with them.
- Emerging tech companies – Season 3 will recruit a broader variety of tech companies (rather than fintechs), provided their solution has a foundation in advancing financial inclusion, which we define wider to include solutions drawing on, or digitising data, that enable the delivery of financial services to the market segment concerned. The selection of suitable emerging tech companies will be based on a brief but targeted application, with an emphasis on relevant problem statements. The final pool of qualifying emerging tech companies will be identified following a two-month development program.
- Business and topic experts – The introduction of a business and topic experts will further the business model development opportunities for participating tech companies. Experts will be strategically sourced through partnerships with leading business schools and universities in each target country. This is a complementary addition to the data science expert.



- Enhanced digital community platform – The launch of Season 3 will be accompanied by an improved digital strategy aimed to enhance the online presence of DataHack4FI and promote Pan-African networking around financial inclusion innovations. Via Facebook and the DataHack4FI website, i2i will disseminate important competition information and relevant media, while ensuring a sense of community for all involved in Season 3.

#### 4.2. Model design

DataHack4FI Season 3 endeavors to promote the use of data in designing and delivering valuable financial services, bridge the data skills gap, and strengthen the community of partnerships created in past seasons. To achieve its objectives, DataHack4FI Season 3 will adopt a competition model that consists of three distinct phases:

(A) Participant recruitment and pairing

(B) DataHack4FI competition Stage 1

(C) DataHack4FI competition Stage 2

*(See Appendix 1 for DataHack4FI Season 3 provisional timeline)*

##### Phase A1: Data enthusiast recruitment

- Objective: To identify suitable data enthusiasts
- Data enthusiasts will be sourced through a combination of mass marketing, marketing targeted at universities, and personal correspondence within existing stakeholder networks.
- Pre-selection and enrollment in a practical program prior to DataHack4FI qualification and pairing
- Selection process: Open applications → Shortlisting → Mentorship program (three months) → Selection of qualifying data enthusiasts
- Mentorship program: TBC
- Provisional timeline: October 2018 to February 2019 *(Concurrent to A2)*

##### Phase A2: Emerging tech company recruitment

- Objective: To identify suitable emerging tech companies
- Emerging tech companies will be recruited through a combination of mass marketing and personal correspondence within existing stakeholder networks.
- Applications are open to a broader variety of tech companies, provided their solution has a foundation in advancing financial inclusion
- A mapping process will be conducted to evaluate the suitability of problem statements submitted by the tech companies



- Selection process: Open applications → Shortlisting → Development program (Three months) → Selection of qualifying emerging tech companies
- Development program: TBC
  - Prerequisite topics: Business model, problem statement refinement, milestones and monitoring
  - Open topics: Business expert to discuss relevant content
- Provisional timeline: October 2018 to February 2019 *(Concurrent to A1)*

### Phase A3: Pairing

- Objective: To pair data enthusiasts and emerging tech companies
- i2i to make pairings according to tech company scoring and preference
- Pairing process: Tech companies present problem statement (write-up) → data enthusiasts select top four problems and submit proposed solutions → meet-up → tech companies evaluate and score data enthusiasts → i2i forms teams based on evaluation and general suitability.
- Data science expert and business expert subsequently paired with a team
- Signing of non-disclosure agreements (NDAs)
  - i2i to set up NDAs between emerging tech companies, data enthusiasts, data science experts and business mentors
- Provisional timeline: March 2019

### Phase B: DataHack4FI Stage 1 (In-country Finals)

- Objectives:
  - (1) To provide a platform for prototype solution design, skills development and networking
  - (2) To identify a pool of teams whose solutions show the greatest potential to impact financial inclusion and the maximum likelihood of release to market
- Innovation hubs and development partners will be engaged to facilitate DataHack4FI Stage 1 in each target country
- A number of thematic meet-ups and webinars will be held to further skills development and networking opportunities
  - Webinars: A number of cross-country webinars will allow international experts to provide mentorship and skills development to participating teams across target countries simultaneously. The primary target audience are the participating teams, but the events will be open to wider audiences within the innovation ecosystem. (Topics TBC: Case studies, panel discussions, Q&A sessions. Process: Advertise four to six weeks prior to the event via social media/meet-up.com/newsletter)
  - Meet-ups: In-country meet-ups will provide a variety of skills development opportunities for participating teams. These sessions will facilitate collaboration within the data innovation ecosystem, providing a platform for sharing

challenges and experiences (TBC: launch event, two main meet-ups, in-country final)

- Stage 1 ends following In-country Finals
  - Team to pitch their solution to panel of judges. Judges will be selected from the data, financial services, innovation and investor sectors
  - The top “X” teams from each country will be identified based on their solutions’ potential to impact financial inclusion and likelihood of release to market. These teams will progress to Stage 2
- Provisional timeline: March to May 2019

#### Phase C: DataHack4FI Stage 2 (Grand Finale)

- Objective:
  - (1) Continued solution development and prototype testing
  - (2) Pan-African networking event that will bring together stakeholders from the 7 focus countries, where DataHack4FI teams will showcase prototype solutions to the judges and an extensive investor network
- Stage 2 ends following the Grand Finale
  - Each team to pitch their solution to the panel of judges. Judges will be selected from the data, financial services, innovation and investor sectors
  - The winning team to receive USD25,000 seed capital and technical assistance toward product development
  - Each team showcases their prototype solution to an extensive network of investors in attendance. Investors will be sourced through engagement with existing stakeholder networks (See *Appendix 2*) and new partnerships established during the competition.
- Provisional timeline: June to Mid July 2019
- Grand finale host: Rwanda

## 5. Communication strategy

The DataHack4FI competition will be supported by an ambitious communication strategy. The communication strategy has two primary objectives:

- (1) Extend DataHack4FI’s reach to as many youths across Africa through the expanded network of strategic partners
- (2) Grow the Pan-African DataHack4FI digital community of data enthusiasts and tech entrepreneurs by leveraging on the competition’s reach across 7 countries

To achieve these objectives, the i2i team will build on the existing reach of the DataHack4FI competition and digital community, as well as drive additional communication activities with the support of a digital marketing agency.

### **Building on the existing reach of the DataHack4FI competition and digital community:**

Season 1 and Season 2 of the DataHack4FI community reached more than 3.9 million Twitter users through the #DataHack4FI with a total of 23.6 million impressions. The website was viewed by nearly 40 000 unique users. This was driven by a coordinated communication campaign that leveraged in-country partners' capacity (i.e. innovation hubs) and their knowledge of local country influencers and media. The in-country partners were provided with communication and brand guidelines and were involved in regular calls with the core DataHack team.

The reach of #DataHack4FI communications was leveraged to build a digital community of data enthusiast and tech entrepreneurs for further engagement. The digital community has been built on Facebook. Facebook was identified as the platform for the community based on analysis of the users across different social media platforms<sup>1</sup>. In September 2018, the DataHack4FI Facebook community was established as a channel for networking, knowledge sharing and engagement. With 220 members (within 4 weeks of going live), we are in the process of migrating the offline community to a digital platform to further unlock cross-country relationships and learning.

Season 3 will build on this approach by:

- Continuing our approach with the in-country partners and replicating the approach with our new in-country partners
- Facilitating discussions around relevant content through the digital community platform
- Building our Facebook community audience through Twitter, our website and local media and linking more specifically with our skills-building activities
- Sharing case studies of DataHack4FI alumni who are positively impacting financial inclusion

### **Driving additional communication activities:**

Season 3 will incorporate additional communication activities to further expand our reach. These additional activities will require support as the digital media and communications will need to happen simultaneously across all 7 countries.

The support required includes:

- Acquisition of a media list across the DataHack4FI target countries

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<sup>1</sup> In 2017, Facebook noted 170 million African users, mostly on mobile. Seven out of 10 internet users in Africa now log onto Facebook.

- Media engagement for all launches (soft and main events) across the 7 countries. This includes press coverage, which would include press releases and potentially, booking of media for attendance and event publication
- Social media campaigns (including boosters) to promote the DataHack4FI competition and associated partners
- Enhanced DataHack4FI Season 3 brand visibility through TechCrunch partnership
- Voice notes advertising the competition to be disseminated via the hub's WhatsApp groups (potentially)
- Multimedia support across each country including livestreaming of the event on Facebook and recording videos and taking photographs
- Additional support for the grand finale

## 6. Work allocation and institutional arrangement

Season 3 of DataHack4FI is a substantial undertaking, which will be overseen by the insight2impact (i2i) facility, a joint initiative of **FinMark Trust** and The Centre for Financial Regulation & Inclusion (**Cenfri**). As seen in Table 2, a number of teams within i2i will be involved in the implementation of this project. The **Application Lab** workstream (FinMark Trust) is responsible for managing this project, led by Dumisani Dube (Head of Applications Lab). **Client Insights** (Cenfri), Application Lab's knowledge partner, will assist in gathering monitoring, evaluation and learning (MEL) insights and compile DataHack4FI Season 3 knowledge products for dissemination.

Table 2: DataHack4FI Season 3 team

			<b>DataHack4FI Season 3</b>
<b>Team</b>	<b>Individual</b>	<b>Title</b>	<b>Role</b>
Applications Lab	Dumisani Dube	Head of Applications Lab	<i>Strategic oversight</i>
			<i>Country lead: TBA</i>
	Nicola Schoeman	Data Science Project Manager	<i>Country lead: TBA</i>
		Research and Innovation	
	Kgomotso Tolamo	Analyst	<i>Country lead: TBA</i>
		Research and Innovation	
	Robert Jones	Analyst	<i>Country lead: TBA</i>
MEL	Emily Westerlund	MEL Officer	<i>MEL</i>
			<i>Research support/Case studies</i>
Client Insights	Michael dos Santos		
i2i Web Portal		Portal Manager	<i>Online portal</i>

<b>DataHack4FI Season 3</b>			
<b>Team</b>	<b>Individual</b>	<b>Title</b>	<b>Role</b>
Communications	Candice Borgstein	Knowledge and Communications Manager	<i>Strategic communications</i>
Partnerships	Mari-Lise du Preez	Partnership Manager	<i>Partnership, community and stakeholder management</i>

DataHack4FI Season 3 will leverage primarily on the networks and partnerships established during Season 1 and 2 of the competition, while offering additional partners and sponsors an opportunity to contribute. Collaboration among these stakeholder networks enable each in-country competition and broadens access to start-up communities within these locations. Anchor partners (one per country), consisting primarily of innovation hubs and co-working spaces, will be engaged to facilitate and coordinate the DataHack4FI competition roll-out in each of the target countries. Identified anchor partners will develop an implementation plan detailing the project requirements and in-country strategy. Following approval and formal contracting, each anchor partner will be responsible for coordinating the various DataHack4FI elements for the competition duration, as well as drive the communications and marketing strategy in their respective country.

## 7. Appendices

### 8.1. DataHack4FI Season 3 provisional timeline

	July '18	Aug. '18	Sept. '18	Oct. '18	Nov. '18	Dec. '18	Jan. '19	Feb. '19	Mar. '19	Apr. '19	May '19	June '19	July '19
Concept formulation and approval	X	X											
Project initiation		X	X	X									
Data enthusiast recruitment & pre-selection programme				X	X	X	X	X					
Emerging tech company recruitment & development programme					X	X	X	X					
Pairing (Team formation)									X				
DataHack4FI Stage 1									X	X	X		
In-country finals (End of April)											X		
DataHack4FI Stage 2												X	X
Grand Finale (Mid-June)													X
Post-DataHack4FI engagement													X
Monitoring, Evaluation and Learning (MEL)								X	X	X	X	X	X
Reporting and documentation													X

## 8.2 Stakeholder engagement overview

In an effort to support emerging tech companies as they develop viable business cases, we intend to introduce a business expert to offer mentorship during Phase A2. These business experts will be strategically sourced through partnerships with leading business schools within each target country.

### Business expert institutions

Country	Business School
Kenya	Strathmore Business School
Rwanda	African Leadership University
Uganda	Makerere University
South Africa	GIBS, University of Cape Town
Zambia	School of Business & Management – University of Lusaka School of Business – Rusangu University
Ghana	Ghana Institute of Management & Public Administration
Nigeria	Pan-Atlantic University – Lagos Business School

In addition, we intend to provide emerging tech companies with an opportunity to pitch their solutions to a pool of potential investors. In this regard, we intend to bring together a number of investors who have a proven track record of investing in start-up companies. Investors will be targeted and engaged on a country-level basis, with further engagement to determine interest in other DataHack4FI target countries. Examples of investors we intend to approach include:

### Start-up investor networks

<b>Goodwell</b>	Goodwell is an impact investment and advisory firm focused on financial inclusion and sustainable development. It invests early-stage equity in Africa and India and offers advisory services worldwide.
<b>MBO Capital Management Limited</b>	MBO Capital Management Limited (MBO Capital) is an African private equity firm that invests in small to medium-sized companies in Nigeria and the rest of Anglophone West Africa to deliver sustainable financial and social returns.
<b>Techno Vision</b>	TechnoVision assesses and implements strategic technology solutions, whether you're a start-up looking for acceleration, a post-revenue company looking for operational growth or a mature organization trying to make sense of the fast-moving world of technology.
<b>Startle Ltd</b>	Startle designs and incubates business solutions to social or environmental problems. Focusing on impact and innovation, Startle businesses drive positive social, health and environmental impact while delivering financial returns to investors.
<b>Viktoria Ventures</b>	Viktoria coaches innovative start-ups and supports their strategic planning and capital-raising activities. The team helps start-ups raise both grant funding from donors and convertible debt finance from angel investors. Viktoria also works with leading local and international clients in an advisory capacity, with a focus on entrepreneurial finance in East Africa.



<b>InVhestia Africa Limited</b>	InVhestia Africa builds financial models used in project and corporate finance deals and company operations for valuation, negotiation, pricing, budgeting, strategy and funding decisions, etc. Our clients range from start-ups, SMEs and corporates across various sectors of the economy and across different countries in Africa.
<b>4Di Capital</b>	4Di Capital is an independent, early-stage technology venture capital firm based in South Africa's "Silicon Cape". Nurture capital is the term that best describes 4Di Capital's purpose and philosophy. It offers support, mentoring, access to networks and seed capital.
<b>Clifftop Colony</b>	Clifftop Colony is an independent corporate finance, investment advisory and operational financial management firm focused on growth companies in sub-Saharan Africa.
<b>Hlayisani Capital</b>	Hlayisani Capital is an empowered African investment manager with a rich heritage of leadership and investment experience through its founding partners. It aims to be a market-leading and innovative private equity and venture capital investment manager in South Africa and Africa, positioned to unlock Africa's unique investment opportunities.
<b>HAVAIC</b>	HAVAIC advises and invests in early-stage, high-growth businesses, offering access to local investments with global prospects. It raises capital and provides strategic and transactional advice. Its investment philosophy is driven by identifying innovative products, processes or programs with disruptive growth potential that have the power to significantly improve on the status quo, with global relevance.
<b>500 Start-ups</b>	500's mission is to discover and back the world's most talented entrepreneurs, help them create successful companies at scale, and build thriving global ecosystems through venture capital.

### Other potential partners:

**Accion** aims to build a financially inclusive world – one in which every individual has access to high-quality, affordable financial services. Whether you're interested in a particular aspect of microfinance, impact investing, or financial literacy, we invite you to explore the different areas of our work and join our efforts to build a world with access to economic opportunity for all.

**Edge Growth** connects business strategy and SME development, commercial leadership and good corporate citizenship, ESD investment and socio-economic impact. It provides Strategy & Advisory services, SME Growth Support, Fund Management and program management.