Hack4Farming Nairobi 2016

The Challenge

The goal of the Hybrid Rice: Breeding by Design project is to improve food security and rural livelihoods among small-scale rice producers in Africa, by developing hybrid rice with a significant yield advantage and creating sustainable hybrid rice agro-businesses to support rice farming in East, West and Southern Africa by determining precise relationships between yield, environment and genetics.

> ➢ *Using your team's expert knowledge and the tools/datasets made available to you, design a solution that can address a business challenge in the East African seed industry. This solution should identify the business challenge, provide a prototype or proof of concept for the solution, and address the sustainability of the solution through a business plan, proposal outline, or other mechanism.*

Presentation Guidelines

Teams will present their concept and/or demonstration on the final day of the event to a panel of judges, who will then select a winning team and present awards. All teams should consider the following when preparing their presentations:

- ➢ Teams will have 5 minutes to give their concept presentation to judges. After the time is up, teams will be asked to conclude their presentation whether or not they have presented all slides.
- ➢ Because of this time limit, we **strongly recommend** that teams practice their presentation prior to the final presentations to ensure they can complete the presentation in the allotted time.
- ➢ Teams must include in their PowerPoint presentation a slide including the full names and contact email addresses of all team members.
- ➢ PowerPoint presentations should be sent to event organizers either before or immediately following presentations.
- ➢ Teams are encouraged to limit time spent discussing the context or "problem" (e.g. agriculture challenges addressed by all participants) during their presentations, and instead to dive directly into their solution and demo, to ensure sufficient time for presentation to the judges.

➢ Teams are also encouraged to include specificity surrounding their project in the presentation. This will give the judges the greatest understanding of the unique value of your project.

Judging Criteria - Grand Prize

Teams will be eligible to win the grand prize, and presentations will be judged for that prize based on the following criteria:
➢ *Impact* – Is there a clear causal link established between the application/idea and seed company businesses?
➢ *Innovation* – Is the solution novel? Does it solve a problem in a new or creative way?
➢ *Technical Achievement* – Does the submission solve a difficult technical problem?
➢ *Sustainability* – Is there a well articulated business model for how the solution will be distributed, adopted and maintained? Why and how would a seed company or their customers implement this idea?

Judging Criteria - Special Prize

Teams will also be eligible for consideration for a special prize for the best use of Internet-of-things (IoT) or big data in their concept and/or demonstration. Team presentations will be judged for the special prize based on the following criteria:
➢ *Use of IoT and/or big data* – Does the concept incorporate IoT technology or big data? The team may use either IoT, big data, or both in the concept.
  ○ IoT is defined as the collection of data from networked sensors or other objects with network connectivity, such as sensors embedded in crops, soil or other physical elements, or other hardware that collects and transmits data.
  ○ Big data uses are defined to include data that is collected or hosted in a cloud-based or parallel-server-based solution in large amounts (e.g. at least 500 GB or more), or the significant use of predictive analytics drawn from large data sets.
➢ *Innovation* – Does the concept incorporate IoT or big data into ag-tech technology in a novel or creative way?
➢ *Essential* – Is the use of IoT or big data in the concept essential to or additive to the concept?
➢ *Applicability* – Is your application of IoT or big data done in a way that is sustainable, applicable and useful in the real world, rather than simply a thought experiment?

Awards

Judges will declare a winning team, whose members will be awarded the following grand prize, sponsored by aWhere and IOTA:

➢ A shared **cash prize of $2,000** (US equivalent) to be split among eligible team members

Judges will also declare a winner of the special prize for the best use of IoT or big data, whose members will be awarded the following:

➢ A **cash prize of $1,000** (US equivalent) to be split among eligible team members
Note: Mentors are not eligible for prizes.