Ignitia

Accra, Ghana

Established in 2010, Ignitia Tropical Weather Forecasting (Ignitia) has developed a state-of-the-art weather forecasting model tailored specifically for predicting tropical weather in West Africa. With 84% accuracy rates, this tool allows farmers to optimise crop production and has a positive impact on their bottom line.

SUMMARY

Ignitia's aim is to help farmers increase yields, minimise crop loss, and boost their production by providing them with the resources to tackle climate change. The company created a highly accurate tropical weather forecasting model which they use to send reliable, location-specific weather forecasts to small-scale farmers across West Africa on a daily, monthly, and seasonal basis. This platform is available through mobile subscription.

CHALLENGE

In West Africa, small-scale farmers are responsible for up to 90% of the region's food production, and yet they do not have access to adequate and accurate models to forecast weather conditions. The region is particularly susceptible to increasingly erratic weather patterns caused in part by climate change, which negatively impacts crop production as well as farmers’ income.

Despite their crucial role in the food system, most farmers do not have access to information that would help them increase their productivity and reduce their risk of crop loss. With 98% of agriculture in tropical West Africa being rainfed, weather information is one of the crucial resources for small-scale farmers.

SOLUTION

Through its product, Ignitia offers an accessible, trusted, and highly-effective decision-making tool for West Africa's farmers.

A subscription includes daily 48-hr, monthly, and seasonal weather forecasts that are tailored to subscribers’ GPS locations and sent directly to their mobile phones via SMS.

The daily 48-hour forecast provides information on the likelihood, timing, and intensity of rainfall. Monthly and seasonal forecasts predict whether the upcoming weeks or months will be drier and/or hotter than normal.

With such forecasts, farmers can make more informed decisions to mitigate crop loss due to weather, increase their resilience by adapting their farming practices, and enhance their productivity through the better timing and use of critical resources.

IMPACT

To date, Ignitia is estimated to have reached more than 4 million farmers, their families, and other customers, helping generate more than 4.2 million tons of produce.

Knowing when and how much it will rain helps farmers decide when to plant, hire labour, rent equipment, apply fertiliser, harvest, and conduct other relevant activities. One of farmers' largest and most critical expenses, such as seeds and fertilisers, are weather-dependent. The ability to harness weather information for planning and decision-making in an effective manner can make the difference between a sparse and an abundant harvest.

COMPETITIVE ADVANTAGE

Most weather forecasting for the tropics uses forecast data provided by global models, which are optimised for the mid-latitudes and are, therefore, poor at predicting small-scale, rapidly evolving tropical thunderstorms, which characterise tropical weather. Ignitia's model is based on ensemble forecasting that mitigates the challenges global models face. The result is a far more reliable probabilistic forecast for the tropics.
In addition, Ignitia’s solution is 97% automated, and uses mainly satellite data. Remote-sensing techniques and automated modelling translate into significantly lower product creation cost, and lower costs for the farmer.

SCALABILITY

As mentioned, from an operational standpoint, Ignitia’s forecasts are 97% automated and use remote sensing. Technically, they can reach small holder farmers on a massive scale by taking advantage of the existing over-saturated mobile phone market and accessing remote areas easily.

The pricing model is very affordable, built to suit farmers’ ability to pay. There are no upfront costs for a season, and there is the possibility to opt out any day from the service by using the same short code they used to subscribe. Partnering with a mobile network provider eliminates the need to create a unique payment method and reduces the prohibitive savings requirements necessary for a large one-time purchase.

Ignitia’s business model is structured in such a way that profit and social impact are mutually reinforcing. The more forecasts the company sells, the greater the agricultural and environmental benefits. Keeping the service low cost for Ignitia Bottom of the Pyramid (BoP) customers ensures greater adoption, which in turn will revolutionise food systems on a wider scale.

ANNUAL REVENUE

- 2018: USD 2.3 million
- 2017: USD 1.7 million
- 2016: USD 1.2 million

*Approximate value based on the financial reports

EXPANSION PLAN 2019-2023

- Build add-on services with the data currently collected.

INVESTMENTS

Ignitia is planning to raise a round for around USD 4 million equity in 2020, to be used for geographic expansion as well as scientific product development.

PARTNERSHIPS

- **Mobile Network Operators, VAS partner** - Revenue Share Agreement to distribute Ignitia’s weather forecasts directly to consumers and allow for direct subscription to the service by farmers (MTN – Ghana; Orange – Mali; 9mobile - Nigeria).
- **NGOs, Development Agencies, Project partners** to identify and distribute weather forecasts to small scale farmers in the region.

AWARDS

- University of Minnesota’s Institute on the Environment Solutions Prize Winner (2017)
- Coop-Änglamark Prize (2017)

FOUNDER

Liisa Smits, Sweden, Founder and CEO

Liisa Smits has two master’s degrees in Physics and Meteorology. She launched Ignitia, securing USD 3 million worth of cash and cash-equivalent assets, and built a team of high-calibre experts. She leads partnership and sales efforts, and currently leads the strategic direction of the company.

CONTACT

Website: www.ignitia.se
Email: lizzie.merrill@ignitia.se