Problem
As one of the world’s largest chocolate companies, The Hershey Company receives cocoa from 12,000 farmers across 12 districts in Ghana sourced through Ghana’s Cocoa Board. Hershey’s does not work directly with the farmers, presenting a unique challenge to ensuring cocoa quality and promoting sustainable agricultural practices on a large scale.

Solution
We are working with Hershey’s to design the CocoaLink application for Android. CocoaLink is an informational application targeted at cocoa farmers to promote best practices and reinforce the training required for sustainability certifications. The app includes both informational articles and quizzes that can be used to assess knowledge retention.

Results
Hershey’s is piloting CocoaLink in the summer of 2017, providing the app to 800 farmers and training them in its usage. After monitoring changes in yield and adoption of best practices, the app will be refined before it is released. It will be freely available to promote widespread adoption of best practices to improve the quality and sustainability of cocoa production worldwide.
HERSHEY’S works with over 12,000 farmers in 12 districts
Bouncing down the dirt roads of rural Ghana, the statistics and numbers begin to tell their story. Plot after plot of dense, tangled farmland attests to the 45% of the country’s workforce that makes its livelihood in the agricultural sector. The broad branches and hanging pods lining the roads affirm Ghana’s status as the world’s second largest producer of cocoa. Basic infrastructure like electrical outlets and paved roads are few and far between, but the massive, isolated cell towers dotting the hills speak to the impressive mobile data penetration of 76%, a crucial communication link in the face of sparse physical and digital infrastructure. It was this crossroads of need and opportunity that led to the partnership between Farmerline and The Hershey Company.

In Ghana, Hershey’s sources cocoa from 12,000 farmers across 12 districts. The scale of such an operation presents extensive challenges for communication and farmer support, creating uncertainty in the quality and sustainability of the cocoa supply. This difficulty is amplified as Hershey’s does not directly purchase cocoa, but sources it through Ghana’s Cocoa Board. To support its mission of quality and sustainability, Hershey’s requires that farming and sustainability best practices be passed down the value chain. However, there is a critical gap in information flow, limiting the productivity and profitability of the whole sector.
Farmers who receive certification training and implement what they learn reap significant benefits. Kwabena Sarfo, a cocoa farmer from Achiase, explained that he learned valuable skills such as proper chemical application and cocoa storage. Now, Kwabena produces higher quality, sustainably grown cocoa, allowing him to sell his product to purchasing companies for a premium price. The certification process, Kwabena said, left him feeling more satisfied with his work because he feels supported in what he is doing. Through the certification process, he has learned proper insecticide application to protect his own health while increasing his ability to support his family.

Farmerline meets farmers like Kwabena in our field work every day, uniquely positioning us as a technology company that understands how to repackage information to suit the needs of farmers. Leveraging our knowledge of the farmer experience and our background using mobile technology to bridge information gaps, we partnered with Hershey's to build CocoaLink. This free Android application capitalizes on the prevalence of mobile data to provide cocoa farmers with digital access to valuable knowledge. The application features educational content including planting tips, proper input usage, and descriptions of best practices while also reinforcing sustainability standards covered in certification trainings. Progress and knowledge retention can be tracked through quizzes that operate on a point system, adding a competitive incentive for continued use. The CocoaLink app is not proprietary to Hershey, making sustainable farming knowledge usable by any farmer with a plot of land and a cocoa tree.

We strongly believe in the ability of mobile technology to bridge gaps in infrastructure and deliver key information to those who need it most. Alongside Hershey’s, we are leveraging the availability of mobile data to improve Ghana’s cocoa industry and the livelihoods of the farmers who call Ghana home.
Developed by Farmerline, Mergdata is a cloud-based communication, surveying, and data management tool. The combination of Android application and web service provides instant analysis of data collected in the field and allows broadcasting of voice and text messages to thousands of phones at once.
Farmerline is transforming smallholder farmers into successful entrepreneurs by increasing their access to information, inputs, and resources to increase productivity. Using the innovative Mergdata platform, Farmerline offers subscription-based information services to rural farmers and licenses its software to agribusinesses to bridge the information gap between organizations and farmers.

For more information visit: farmerline.co

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