I. Introduction

Sènèkèla is a mobile agricultural value-added service (Agri VAS) in Mali offering a range of information on agricultural topics and market prices. The service is currently available to customers on a helpline in all zones covered by Orange Mali and a USSD channel in two regions.

Sènèkèla was formed through a collaboration between Orange Mali, Institut d’Economie Rurale (IER), International Institute for Communication and Development (IICD) and RONGEAD. The service was supported by GSMA as a grantee of the mAgri mFarmer initiative until September 2014.

PRODUCT TIMELINE

<table>
<thead>
<tr>
<th>YEAR</th>
<th>EVENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>SEPT 2012</td>
<td>Orange begins planning for the launch of a new Agri VAS</td>
</tr>
<tr>
<td>JULY 2013</td>
<td>Sènèkèla is launched in Mali offering agronomy information and market prices via a call centre</td>
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<tr>
<td>FEB 2014</td>
<td>Sènèkèla launches the USSD channel providing market price information only in the Sikasso region</td>
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<tr>
<td>APRIL 2014</td>
<td>Orange launches large-scale marketing efforts</td>
</tr>
<tr>
<td>SEPTEMBER 2014</td>
<td>Sènèkèla customer base reaches almost 180,000, mostly through the USSD channel</td>
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</tbody>
</table>

PRODUCT SUMMARY SEPTEMBER 2014

<table>
<thead>
<tr>
<th>YEAR LAUNCHED</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUSINESS MODEL</td>
<td>Consumer pays</td>
</tr>
<tr>
<td>TARGETED DEVICE</td>
<td>Basic phone</td>
</tr>
<tr>
<td>PRIMARY DELIVERY TECHNOLOGY</td>
<td>Pull: Helpline, USSD</td>
</tr>
<tr>
<td>PRODUCTS &amp; SERVICES</td>
<td>Market prices, Agronomy advice</td>
</tr>
<tr>
<td>MARKETS DEPLOYED IN</td>
<td>Mali</td>
</tr>
<tr>
<td>ORANGE MARKET SHARE</td>
<td>55%</td>
</tr>
<tr>
<td>NUMBER OF USERS</td>
<td>177,817</td>
</tr>
<tr>
<td>ARPU (USD)</td>
<td>0.41 USD</td>
</tr>
</tbody>
</table>
II. Market overview

Mali is a landlocked country in West Africa and is among the 10 poorest countries in the world. 50% of the population lives on below 1.25 USD per day. Mali’s economy is largely based on agriculture, accounting for almost 34% of the country’s GDP and 80% of the workforce.1 While holding great potential to drive the county’s economic growth, the agricultural sector is largely underdeveloped with only 7% of 44 million arable hectares of land cultivated.2 Among a number of constraints to agricultural development and economic growth such as poor infrastructure and a lack of financial services for the poor, rural smallholder farmers lack credible and accessible sources of agricultural information. Orange estimate the potential market for Sènèkèla to be 1.1 million farmers, of which Sènèkèla had reached 2% by September 2014.

There is a definite gap in the market for a service such as Sènèkèla, which has the opportunity to be the first large scale Agri VAS in the country. Two-thirds of the population already has a mobile subscription totaling up to 10.3 million unique mobile subscribers in the country in 2014.3 Orange is one of two players in the Malian mobile market with 55% market share.

KEY CHALLENGES FOR SÈNÈKÈLA

A slow start for the service may have been influenced by a period of political unrest in the country’s northern region. In 2012, a military coup in the country provoked economic sanctions by Mali’s West African neighbors and the international community resulting in a period of political and economic instability. World Bank data reveals a stark recession from 2010 reaching a negative 0.4% GDP growth rate in 2012. The service launched only a year later in July 2013.

With a GDP per capita of 715 USD and a slow rise in annual growth rate of 2.1%,4 Mali is a growing but weak economy. Sènèkèla must therefore prove its value as a service to resource-constrained smallholder farmers at the bottom of the pyramid (BOP).

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2. in 2010; http://www.feedthefuture.gov/sites/default/files/country/strategies/files/MaliFTFStrategicReview_0.pdf
III. Service Design

ACCESSING CONTENT FROM SÈNÈKÈLA

To access agronomy content, users can call the short code ‘37333’ to reach the helpline, which is staffed by agricultural experts and is available from 8am – 7pm on Monday to Saturday. Customers can access agricultural information in French (the official language of Mali) and Bambara (spoken by a third of Malians). No registration is required to access the helpline.

To access market price information on the USSD channel, users can dial short code ‘#222#’ to receive SMS messages about markets in Sikasso and Koulikoro regions. The content is currently only available in French. Users can also access market price information through the call centre.
IV. Backend: Overview of systems and technology providers

To produce agronomy information for Sénékela’s helpline, the IER (a nationwide institute for agricultural research) developed a database specifically for the service. The database includes information on maize, shallot/onion, shea (butter and nut), cashew, rice, millet, potato and sweet potato for the Sikasso region; maize, sesame, shallot/onion, shea (butter and nut) for the Koulikoro region. Using this database, in-house agronomists can search for agronomy facts to support helpline customer inquiries.

To develop a new source of accurate and reliable market price information, Orange partnered with IICD to invest in a network of agents for price collection in each market of the main town and surrounding areas. IICD agents collect market prices in the Sikasso region from 12 markets (four daily markets and eight weekly markets) three times a day. The raw market data is collected and aggregated by IICD and then sent to RONGEAD for quality assurance and analysis. RONGEAD drafts the aggregated data into SMS messages to be made available to users through the Sénékela service.

V. Business model

The Call Centre (short code ‘37333’) costs 50 CFA (0.10 USD) per minute to access, which is less than half the usual network rate of 108 CFA (0.21 USD) per minute. The USSD channel (short code ‘#222#’) costs 75 CFA (USD 0.16) per message. Orange does not have a fixed revenue share agreements with any other parties.

Orange’s business partners include IER, IICD and RONGEAD. IER was remunerated a flat rate payment for the provision of agronomy content via fact sheets and for the creation of the database used by the experts in the call centre. IICD and RONGEAD, who were partners for the creation of market prices on the USSD channel, are compensated in the form of a periodic payment for their contributions. These costs have been supported by the GSMA mFarmer grant.
VI. Early results

WHO ARE THE EARLY ADOPTERS OF SÈNÈKÈLA?

• The early adopters of Sènèkèla, who have requested information on the service more than once, made up 20% of the customer base in September 2014.

• The profile of this segment may be reflective of that of the entire customer base of Sènèkèla, which is largely young, male subsistence smallholder farmers.

• Repeat users of the service have higher levels of formal education than trial users; 50% of them have received secondary or higher education.

• Women are valued users of the service and are more likely than men to become repeat users. Although women only make up 25% of Sènèkèla’s early adopters, they make up almost half of the revenue from this segment.

• 66% of all requests by early adopters concerned market prices, suggesting this information is highly valued.

PERCENTAGE OF USERS AT EACH STAGE OF THE CUSTOMER JOURNEY

![Figure 1](image-url)

- Trial: Those who have accessed content once
- Repeat: Those who accessed content multiple times

APRIL 2014

- Trial: 82%
- Repeat: 18%

SEPTEMBER 2014

- Trial: 80%
- Repeat: 20%

Based on helpline accesses, most customers are using the service only once; while only 18%-20% of users are requesting information more than once. This has remained relatively stable throughout the period.

IMPACT AND BEHAVIOR CHANGE

Some Sènèkèla users in Sikasso and Bougouni region reported making changes in their information-seeking behaviour owing to the Sènèkèla helpline. Both farmers and traders below have given examples of how they used Sènèkèla’s market price information to conduct their business:

• Two traders reported using Sènèkèla once a week to get price information on cashew nuts from producer villages; the information helps them decide which market to attend and the volume of nut to buy.
• One cereal trader testified that he started to use Sènèkèla service as one of his information sources (besides radio and middlemen) to cross-check market prices.

• Two farmers attested that they no longer wait for a week after loading the trucks to learn about accurate market prices. They can now learn about market prices from Sènèkèla in real time.

Given the service has only been operating for a short period of time, there is limited anecdotal evidence of users have benefited from the service. However, there have already been some reports of financial benefits to some traders and farmers:

• Two traders reported earning an additional 5 CFA/kg in their incomes using advice from Sènèkèla.

• One input dealer reported more growth in his business: more farmers purchase his products now that he provides advice from Sènèkèla services to them.

BARRIERS TO UPTAKE

• Poor network coverage – Network issues can be a problem, especially for rural users. Over half (52%) of trial users calls and over a third of all calls to the service did not connect to the helpline; in total, 90% of those who did not connect on their first attempt never returned. To overcome this pressing concern, Orange can include the marketing of Sènèkèla near its ‘Djamma phones’ – phones with high-powered receivers facilitated by Orange Mali and distributed in rural areas where network infrastructure is poor.

• Cost-related concerns – Affordability is a central concern affecting the target BOP smallholder farming population. Though the cost of calling the helpline is cheaper than normal airtime rates, users must be convinced of its usefulness and value in order to invest in the service. In focus group discussions, 95 percent of participants expressed that the service cost (50 CFA/minute for a call and 75 CFA per SMS) was too expensive. Orange tackled this by offering the service for free for a limited period, which led to an increase in usage during the period.

• Low airtime balance of rural users – Many users are unable to connect to the service due to a lack of airtime credit. The Orange team suggested tackling this solution by offering an ‘emergency credit’ service, to provide a credit loan of up to 200 CFA (0.40 USD) to be repaid when the account is recharged. This would allow customers who have little to no airtime credit to continue their call on the service.

• Incomplete content – Participants in the case study revealed that the agronomy and market price advisory provided by Sènèkèla might not meet all of their information needs. Agronomy information excludes topics on livestock, fisheries, agro-forestry and wild fruits; all of which were of interest to focus group participants as potential sources of income. Women in particular were interested in income generating opportunities from wild fruits and livestock produce (e.g. poultry). Participants also expressed an interest in market prices from a greater number of local markets to make comparisons.

• Traditional sources – Presently, person-to-person and traditional media sources are most used by farmers due to their long tradition as information sources. Farmers have a strong preference for direct communication and extension workers and peer farmers are favoured information sources, even though quality of these sources may be perceived as generic and impersonal. Lack of language and technical literacy may also play a factor in users’ preference for more traditional sources of information.
VII. Marketing & Distribution

Orange had conducted very little marketing and promotion in the early months following its service launch, with limited visits to agricultural events and to villages. Larger scale marketing efforts were in place in April 2014 when the USSD channel was fully operational, including targeted TV, radio, and press campaigns in the areas covered by Sênèkèla. This resulted in an exponential increase in Sênèkèla’s user base adding up to 177,000 new users.

VIII. Looking ahead

Understanding the needs of potential and existing users, Orange plans to improve Sênèkèla’s value by offering advisory services on a greater number of crops in its database. As women are valued customers of Sênèkèla, including information on content of interest to women, such as wild fruits and poultry would further engage these users.

By tackling current barriers to uptake and extending its ongoing marketing efforts, Orange can close the information gap and extend a valuable service for a wider number of users in Mali.
The GSMA represents the interests of mobile operators worldwide, uniting nearly 800 operators with more than 250 companies in the broader mobile ecosystem, including handset and device makers, software companies, equipment providers and Internet companies, as well as organisations in adjacent industry sectors. The GSMA also produces industry-leading events such as Mobile World Congress, Mobile World Congress Shanghai and the Mobile 360 Series conferences.

For more information, please visit the GSMA corporate website at www.gsma.com. Follow the GSMA on Twitter: @GSMA.

Mobile for Development brings together our mobile operator members, the wider mobile industry and the development community to drive commercial mobile services for underserved people in emerging markets. We identify opportunities for social, economic impact and stimulate the development of scalable, life-enhancing mobile services.

mAgri catalyses scalable, commercial mobile services that improve the productivity and incomes of smallholder farmers and benefit the agriculture sector in emerging markets. The GSMA mAgri Programme is in a unique position to bring together mobile operators, the agricultural organisations and the development community to foster sustainable and scalable mobile services that improve the livelihoods of smallholder farmers. This report is part of the mFarmer Initiative, launched by the GSMA mAgri Programme in 2011 in partnership with USAID and the Bill & Melinda Gates Foundation.

For more information about GSMA mAgri Programme visit our website at: www.gsma.com/mobilefordevelopment/programmes/magri

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