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Deciding on your business model

This is one of a series of information sheets for people designing and implementing agricultural market information systems in Africa.

This sheet presents a useful way of planning your market information service. It is based on the business model canvas, developed by Osterwalder and Pigneur (2010).

You need to work out the answers to nine questions (Table 1), which are neatly arranged on the **business model canvas** (Figure 1):

1. What is your product or service?

This is what you want to sell to your customers. It may be **information** (prices, weather information, etc.), **services** (trends, comparisons, analysis, etc.), or **tools** (such as ready-to-use software or training). You may produce more than one type of product or service, for more than one type of customer. For example, you may provide price data to farmers, and analysis to traders and processing companies.

See the sheet on *Identifying clients and planning services* in this series for more information.

2. Who are your customers?

Your customers may include:

- **Market actors** (those who produce, buy and sell the commodity): farmers, farmer groups, traders, processors, wholesalers, retailers, exporters and importers.
- **Market supporters** (others interested in the market or who provide services to the market actors): input suppliers, banks, insurers and other financial organizations, research institutes, donors and development agencies, extension organizations, cooperatives, industry associations, nongovernment organizations, transporters, government agencies, commodity analysts and commodity exchanges.

See the sheet on *Identifying your clients and planning services* for more information.

Table 1. Questions about your business model

1. What is your product or service ?	
2. Who are your customers ?	
3. What marketing channels will you use to provide your product to your customers?	These are marketing questions
4. How will you create and maintain a relationship with your customers?	
5. What income streams can you generate?	
6. What resources will you need to create your product or service?	
7. What activities will you need to undertake to create the product or service?	These are production questions
8. What business services and partners will you need?	
9. What costs will you incur?	

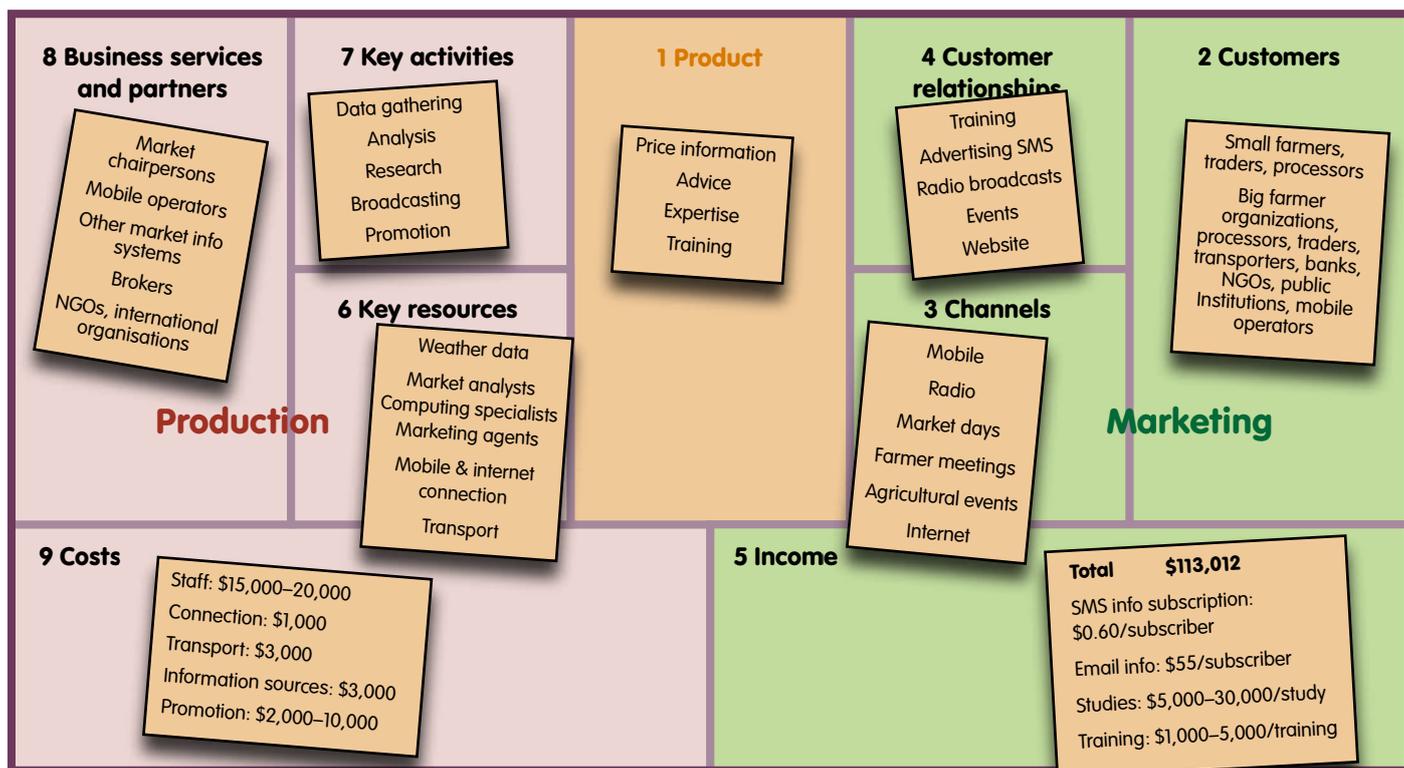


Figure 1. Example of a business model canvas for a small market information system

3. What marketing channels will you use to provide your product to your customers?

How will you get your product or service to your customers? You can use a range of traditional and non-traditional channels.

- **Display:** bulletin boards, notice boards and electronic media boards at marketplaces
- **Printed:** newsletters, bulletins, magazines and newspaper articles
- **Broadcast:** radio and television
- **Computers:** websites, email and social media
- **Mobile phones and tablets:** SMSs, apps, web-based mobile service and social media.

See the sheet on *Disseminating information to your clients* for more.

4. How will you create and maintain a relationship with your customers?

How will you introduce your product or service to your potential clientele? How will you persuade them to pay for it? How will you handle the payments? How can you get feedback from them about whether they like the service, or on what other features they would like?

The most effective mechanisms will depend on your target clientele. For farmers, for example, consider advertising on billboards, distributing flyers in your target area, and getting development organizations to promote the service with the farmers they work with.

Once you have gained a toehold, the best recommendation is word-of-mouth: satisfied clients talking about your service to their friends, neighbours and business partners.

You may decide to prioritize some of your clients, or to offer some products or services for free and to charge for others. Consider offering price discounts and additional products to attract customers.

5. What income streams can you generate?

Revenue streams

Some of your channels will generate revenue for you. For example, you can charge users to get information on their mobile phones. Others (such as notice boards) are harder to make money from – but you may still be able to use them to sell advertising. Below we focus on generating income from mobile information services.

Consider the following income streams for your products or services. Work out how much money

each stream can deliver in order to make your business sustainable.

For each of these categories, you need to decide on your **pricing strategy**. Should you provide some information for free, but charge for more detailed information or analysis? How about offering an introductory service for free (or for a nominal fee), and charging only those users who exceed a certain limit? Or offering bulk subscriptions for the members of farmers' organizations? Should you charge more for premium services and use the additional income to cross-subsidize a basic service aimed at small-scale users?

See the **Income** sections in Figures 1 and 2 for examples of the annual income received by two market information systems.

User fees

These include monthly or annual subscriptions, or a pay-per-message arrangement (for example, charging the user for each SMS sent).

Experience shows that the subscription model does not generally bring in enough revenue unless you can sign up a large number of individual users. You also have to share your revenues with the mobile network operators, which in general take around 75% of the total. It is possible to get around this by using internet-based SMS delivery channels or by issuing your own SIM cards for users to put in their phones. See the sheet on *Choosing and working with partners* for more information.

To avoid having yourself (or your agents) handling a lot of tiny cash transactions, you will need an electronic system to collect the payments. One alternative is to sell subscriptions to farmers through farmers' organizations, cooperatives or development organizations to re-sell to their members using "mobile money" (payments made via a mobile phone).

Questions to ask: How much is each user willing to pay for your service? Would they subscribe to a messaging service or a regular newsletter? Or would they prefer to pay per message sent or received? How can you collect these payments? Will you have to share the revenue with someone else, such as a mobile network operator? How many users do you need to break even?

Contracts

Bigger clients such as processors and large traders may be willing to pay for certain services, such as comparisons among markets, trends over time, or in-depth analysis of specific topics at their request.

Questions to ask: Would firms be willing to pay for certain services? How much? How many such clients can you attract? Would they pay for regular updates, anytime access, or single datasets or *ad hoc* studies? Would they make repeat purchases?

How big is your market?

If you are a commercial provider, you will need to charge users for your services. Here's a rough way to work out how big the potential market is.

Decide who your clients are, work out how many of them there are, then estimate how much each one will be willing to pay a year for your services. Multiply together to get an estimate of annual revenue from this source.

Table 1 gives an example for farmers. You should plug your own estimates into the calculations. You can do similar exercises for other clients, such as advertisers or institutional subscribers.

Table 1. How big is your market? An example using farmers

	Example	Total
What is the total population of your country (or the region you want to serve)?	10 million	10 million
What percentage are in farming households?	× 50%	5 million
How many people in a household?	÷ 5	1 million
How many of them would be willing to pay for your market information service?	× 10%	100,000
How much per month would they be willing to pay?	× \$0.50	\$50,000/month
How much is that per year?	× 12	\$600,000/year

Such calculations will tell you the **maximum** size of your market, and therefore the gross revenue you can earn – **if** you do an excellent marketing job and persuade every one of your target clients to pay for your service. Doing this is hard. Be realistic!

Advertising

When you register users, you will gather information about them. This is of potential interest to advertisers who wish to target particular population groups. If you work with a mobile network operator, it may want to use this information to target its own messaging. You need to negotiate terms of an agreement with the operator on accessing and using this information. Also be careful to comply with privacy and data-disclosure laws in your country. Remember that clients may refuse to provide any information if they are worried it might be passed on to the government. See the sheet on *Data: Ethical and legal issues* for more information.

Questions to ask: Can you use these profiles to target advertising at people or companies? Who are the potential advertisers, and how much would they pay? What terms can you negotiate with a mobile provider? How would advertising appear – separately or in association with your messages?

Donors

Development agencies, the government and non-government organizations can be a good source of initial support, and can put you in touch with potential farmer clients. But donor support tends to be short-term and tied to particular projects. Do not rely on it to build a sustainable



Working out who your customer is and what types of information she wants – and is prepared to pay for – is one of the most important steps in developing your business model

business. See sheet on the *Role of donors and NGOs* for more.

Some development organizations pay an initial subscription (say, for one year) for their farmer clients. The hope is that the farmers will continue to pay the subscription themselves if they find the service useful. But persuading them to do so can be difficult: many will allow their subscriptions to expire at the end of the trial period.

Questions to ask: Can you use donor support to get your service started and to help reach a critical mass of users? Will the donor support push your business in a direction that is not sustainable? Can you attract other donors to support your service? How can you persuade users to make the transition from a free service to one they have to pay for?

Other income sources

Your system will generate a wide range of data, and your staff will gain expertise. You may be able to convert these assets into revenue. You could offer training courses, prepare training materials or write extension guides and newsletters. You could prepare detailed studies of markets on request, conduct surveys or do monitoring and evaluation work on contract.

Questions to ask: What additional types of products or services can you develop based on the core of information and expertise you have? How much revenue might such sources bring in? Will the income exceed the costs of delivering these products or services?

6. What resources will you need to create your product or service?

So far we have been looking at the marketing side of the business model canvas in Figure 1. We can now move over to the production side. This is where you identify the resources you will need to produce and deliver your products or services. They will include some combination of these resources:

- **Human:** the team of field agents to gather data, software developers, analysts, marketing specialists, managers and support staff.
- **Intellectual:** these include the data you gather, your analysis, the software you develop or use, and your patents, partnerships and brand.
- **Physical infrastructure:** this category includes offices, computers and equipment.
- **Financial:** the cash, donor support or lines of credit that you will need to develop and market the product or service.

7. What activities will you need to undertake to create the product or service?

You will need to do research on your potential clients and the products and markets you want to cover. You then have to acquire or develop software and set up a system to gather, analyse and disseminate information, attract and retain customers, and process their payments.

For more information see the other sheets in this series, especially *Developing an agricultural market information system*.

8. What business services and partners will you need?

You will need to collaborate with various organizations:

- **Information sources** such as the ministry of agriculture, the weather bureau and market administrators.
- **Dissemination organizations** such as mobile network operators and radio stations.
- **Information analysis services** such as software developers (if you do not have these in-house) and university crop or livestock specialists (if you want to provide production advice).

See the sheet on *Choosing and working with partners* for more information.

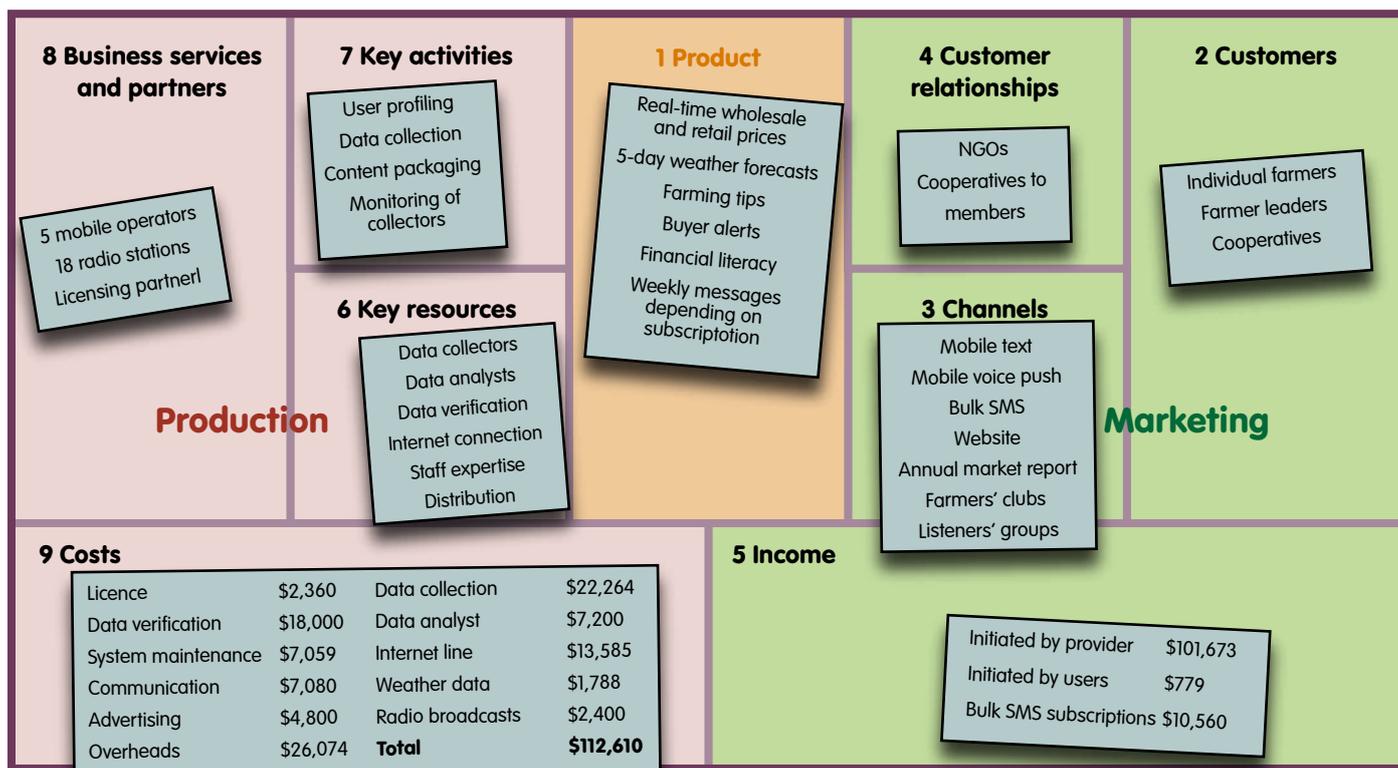


Figure 2. Example of a business model canvas for a medium-sized market information system

9. What costs will you incur?

What are the different types of costs that will you incur? See the **Costs** section of Figures 1 and 2 for examples of the annual costs incurred by two market information systems.

Planning and development. You need to re-research your potential market, set up your market information system, buy, adapt or develop and test software, and train staff how to use it. Platforms and software are changing quickly, so adapting and upgrading them is a continuous task.

Information management. You need to employ enumerators to gather information, staff to check and process the data, specialists to analyse the information and develop market advice, and experts to answer questions.

Distribution. You need to get your service to your clients somehow. That may mean sharing revenue with a mobile operator, paying for radio or television airtime and newspaper space, and paying for printing and distribution of newsletters. Mobile operators may take around 75% of the revenue, leaving you with very little. On the other hand, they may be the only way to reach the number of subscribers you need to break even.

Promoting and training. You need to make potential users aware of your service, and persuade them to sign up and start using it. You may need to train farmers and other clients in how to access

and use your service. Development agencies can be very helpful in getting farmers familiar with your service and how to use it.

Human resources. These include the market enumerators and the managers of the platform, but also people dealing with communication, training and development of technologies. Skilled staff can be expensive, and they have many other job opportunities. You need to train them, motivate them, and pay them enough to retain them. Usually, they represent around 70% of your costs.

Communication linkages. You will need to have internet connectivity and may need to lease a high-volume dedicated line from a telecommunications company.

Equipment and overheads. You need to pay for office space, computers and other equipment, phone and internet connections, backup storage, cloud computing services, licences, registration fees, management, security, tax, etc.

Calculating the balance

In creating a new system, you will incur a lot of costs up front: planning and developing the system, attracting the first customers, and covering the running costs before the service starts generating revenue. You will need some **initial capital** to pay for these costs.



Paul Mundy

Groups of farmers who bulk their produce before selling it can use a market information service to identify traders and find out the current price.

Market information systems have fixed and variable costs. The **fixed costs** tend to be high: they include gathering and analysing data, software development and licences, office rental, management, etc. The **variable costs** of serving each new user, on the other hand, are very low.

That makes it crucial to attract enough paying customers to reach the **scale** you need to break even. You need to work out how many customers, paying how much each, you will need in order to cover your costs.

Achieving scale takes **time**. You must make a realistic prediction of how long it will take to become profitable, and make sure you can cover the costs in the meantime.

It is very difficult to **cut costs**. Reduce the number of enumerators, and you cut the number of markets or commodities you can cover. Save money on software development, and your software will quickly get out of date. Save money on analysts, and you cannot produce the quality advice and reports you need.

So the trick is to find ways to **increase your revenue** without incurring big new costs. That means attracting new subscribers, developing new products (such as sector reports) based on your historical data, and selling advertising to firms that want to reach your subscribers.

More information

■ **Osterwalder, A. and Y. Pigneur.** 2010. Business model generation. A handbook for visionaries, game changers, and challengers. Wiley, Hoboken, NJ. www.businessmodelgeneration.com/book

Agricultural market information systems in Africa

Sheets in this series

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