

Business models for innovators working in crisis response and resilience building

EXPLORING SCALABLE BUSINESS MODELS
FOR HUMANITARIAN INNOVATION

BY IAN GRAY, CATHERINE KOMUHANGI,
DAN MCCLURE, AND LYDIA TANNER



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PHILIPPINES LAB

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Introduction

Scaling is widely recognised as a critical challenge to the success of investments in humanitarian innovation. While the sector has broadly adopted the practices of Lean Startup prototyping, the mastery of ‘failing fast’ and of piloting has had limited success in the humanitarian sector’s ability to deliver impactful change to people affected by crisis. Even as the number of successful pilots has grown, these projects consistently seem to get stuck in the pilot stage without being able to develop further.¹

The barriers to scaling are particularly pronounced for locally based innovators, who themselves may be the recipients of aid. They face barriers of many kinds – regulatory, cultural, infrastructure, supply chain, support and training – that can dwarf the initial issues involved in pilot testing. Their innovations are often more complex than commercial technology products and must be tailored to a specific environment. Even when working versions of their innovations are fully developed, these innovators must find a sustainable business model. Instead of relying on the prospect of commercial success to attract investment and provide operating funds, these innovators must work at the margins of commercial viability or develop new models of support that do not require commercial markets.

The DEPP Labs programme was designed to support and encourage locally-based, locally-focused innovators. The labs are located in areas where disasters remain a clear and present risk and are led by local teams that engage local innovators on local problems. While there is no reason to reject commercial innovation paths, they may not always be possible because problems tied to disaster preparedness are not always commensurate with a community’s ability to pay for a solution. Although there may be a strong demand for the innovation from the community, this may not be translated into commercially effective demand (where the customer is both willing and able to pay). The inability of the primary users to pay means it can be difficult to create a viable revenue model.

This creates a need for new insights regarding the journey to scale for innovators who lack commercial business opportunities to fund and grow their innovations. Established commercial innovation lab models, scaling methodologies and investment strategies make key assumptions that

1. McClure and Gray (2014). Scaling: Innovation’s Missing Middle. Presentation at the Humanitarian Innovation Conference.

align poorly with complex innovations deployed in volatile environments such as areas affected by war or disasters. If the humanitarian sector wants to address these problems with creative innovation, it must help to pioneer new innovation tools and resources, instead of simply borrowing what worked in Silicon Valley and other commercial entrepreneurial models.

Of course, selecting a business model is not the only challenge an innovator must address when scaling. There are other issues such as designing solutions, overcoming barriers to implementation, and customising solutions where necessary. These challenges are important, but are outside the scope of this report, except where they impact the selection and adoption of business models. For example, since humanitarian crises often occur in environments with poorly functioning markets, innovators

will likely experience long and frustrating periods of generating interest in their innovation. This will require them to explain why the problem they are solving is important for the affected community, and why adoption of the solution is important.

Many factors are important for successfully scaling humanitarian innovations. This paper focuses on the processes for selecting a business model and achieving financial sustainability. It is designed for organisations

and initiatives working with social impact innovators. The paper is divided into two parts. It begins by looking at the journey the innovator must navigate before they are in a position to select and implement a business model (Part 1). It then provides a more detailed inventory of business model options appropriate to innovators in this environment, using examples from the DEPP Labs (Part 2). The paper aims to walk through the various stages involved in developing a business model and to present the challenges and opportunities associated with a range of specific models in a humanitarian context. It is not intended to be a comprehensive list of strategies and challenges. Instead it provides a foundation for working with innovators in the DEPP Labs and other similar programmes.

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THIS PAPER FOCUSES ON THE PROCESSES FOR SELECTING A BUSINESS MODEL AND ACHIEVING FINANCIAL SUSTAINABILITY. IT IS DESIGNED FOR ORGANISATIONS AND INITIATIVES WORKING WITH SOCIAL IMPACT INNOVATORS.

Methodology

OBJECTIVES

The aim of this study was to generate learning about pathways to scale for non-commercial local innovators. We wanted to:

- develop testable models of how innovations scale, and to provide insights that will accelerate the delivery and impact of local humanitarian innovations.
- explore how chosen models for financing innovation can be integrated into the innovation process.
- assess the appropriateness of different models when the end users are community members who are vulnerable to natural disasters and have limited capacity to pay.

APPROACH

The methodology included the following elements:

Consultations with innovators. We conducted nine in-depth interviews with innovators from DEPP's labs in Kenya,² Bangladesh,³ Philippines⁴ and Jordan.⁵ The interviews focused on the business models that were being explored or pursued, the challenges these involved, and capital and operational costs.

Business models. Options were selected based on our own experiences and consultations with innovators, along with previous work by the Global Alliance for Humanitarian Innovation (GAHI), Response Innovation Labs (RIL), Humanitarian Innovation Fund (HIF) and others around barriers and pathways to scale (see bibliography). The models were chosen on the basis that they are appropriate for the types of innovators that DEPP supports.

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2. Innovators from Kenya were: Drought Cure, Mt. Marsabit Women's Dairy Group and Maisha Maathenge.
 3. Innovators from Bangladesh were: Community Volunteer Firefighter Team and River Sand Filtration.
 4. Innovators from Philippines were: Bottle-Net Life Jacket and Bakwit Kit.
 5. Innovators from Jordan were: Medicine Bank and Twig.

Research. We conducted a desk review of relevant documents and papers to support our analysis and inform recommendations. The desk review focused on (a) business models in refugee settings, and (b) business models for community-centred innovators.

Feedback from labs. It was important to incorporate practical insights from those supporting DEPP Labs innovations. We involved lab managers, and other team members, in analysing and developing the research. Three online discussions were held to discuss early findings and understand innovators' and lab managers' perceptions of the analysis. The workshops also aimed to understand differences in the four lab locations.

LIMITATIONS

There were two primary limitations for the research:

1. The online literature is biased towards innovations involving technology. Many of the examples focus on how different business models can be applied to online platforms, products and services. There are fewer documented examples of approaches to scaling low-tech products in humanitarian contexts.
2. There are relatively few examples of community-oriented innovation labs, particularly within humanitarian contexts. This required us to extrapolate from the experiences of innovators in other sectors. ■



PART 1

The journey to sustainability

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Sustainable innovation requires a viable revenue and operating model, where the value proposition, market, income stream, and implementation strategy is clear and relevant for a humanitarian context.



INTRODUCTION

This research aims to explore scalable business models that are relevant to innovators in humanitarian labs. There are three important contextual factors to this work:

- **The unique nature of humanitarian contexts.** Humanitarian innovation takes place in environments that are prone to disaster and where 'duty bearers' (those with a particular responsibility for promoting human rights) can be unable to meet basic needs or ensure that rights are respected. These settings are often unpredictable, with significant resource constraints, dysfunctional markets and an influx of external agencies. Business models from the private sector, the social innovation sector and even the development sector can come up short when applied to the humanitarian sector.
- **The unique nature of working with community-centred innovators.** The DEPP innovators are individuals and teams who belong to the affected population or come from the surrounding area. This means they will design their innovation with a strong focus on a selected community group.
- **The unique nature of social impact innovations.** Commercial innovations are focused on technologies, products or services that can generate substantial profits at scale. Social innovations are more concerned with delivering impactful change to a particular community group.

BUILDING A SUSTAINABLE MODEL

The core of a sustainable business model is its ability to generate the operating revenue that the innovation and innovator need to continue to work. Once the initial funding to develop an early prototype and pilot has run out, the innovator must look for new types of funding that are predictable and sustainable. Fortunately, there are many ways that innovators, even in the challenging low-resource environments facing communities in crisis, can identify revenue sources, pitch their ideas and ultimately operate with a sustainable revenue stream.

Unfortunately, few of these opportunities are easily claimed. An innovator must be able to take their innovation up the four levels illustrated below to successfully obtain an ongoing funding stream.

- **Level 1: Understand your value.** The first level of readiness should be a key focus of the pilot phase. For a business model to be viable, the innovation must produce value for someone. At this point, the innovator should not be concerned about whether the person who benefits from the innovation can pay for it. The initial questions they need to answer are: What problem does the innovation solve? Who has the problem? And why is solving the problem important? Once an innovator can deliver a convincing answer to these questions they have laid a solid foundation for the revenue model.



Innovator Hashine Noman oversees installation of his first commercially-sold rain water harvesting unit to an NGO partner in Cox's Bazar, Bangladesh. **UDHVABANI INNOVATION LAB**

- **Level 2: Identify a market.** The next level explores who can potentially buy the innovation, how they view its purpose, and what resources they have available. This examination of how and where the innovation will be used helps to identify the types of market that may be feasible. For example, just because someone has a need, it doesn't mean they have the ability to pay for a solution. Many people, and particularly people in crisis, cannot afford to pay for additional products or services. In Level 2 of the journey, the innovator must search the ecosystem of people and organisations who can pay for the innovation. In many cases this may be an organisation like an NGO or a government agency, but it might also be someone else from the local community.
- **Level 3: Select a strategy.** There are many different strategies for bringing an innovation to market. With an understanding of how the innovation creates value (Level 1) and the markets that the innovation can potentially serve (Level 2), it is possible to consider a range of detailed strategies for generating sustainable revenue. Some of these strategies assume that customers have money to pay for improved services, while other strategies focus on 'proxy buyers' such as NGOs and government agencies. Each strategy comes with pros and cons that must be evaluated against other strategic options. In many cases, the final strategy will be a combination of multiple business models. (Part 2 provides an inventory of useful business strategies for innovators working in crisis areas and low resource environments.)
- **Level 4: Validate capabilities.** Implementing a sustainable business model is a difficult job that requires a variety of skills and resources. The final level begins by validating the effectiveness of the selected strategy (Level 3), making sure that it actually performs well in the

real world and that it generates sufficient funding. The funding obtained must ultimately support the proposed long-term operation of the innovation. This requires a closer look at operating costs, including the funding needed to deal with unexpected challenges, to pay a management team and to support future growth. At this level, innovators also need to engage with

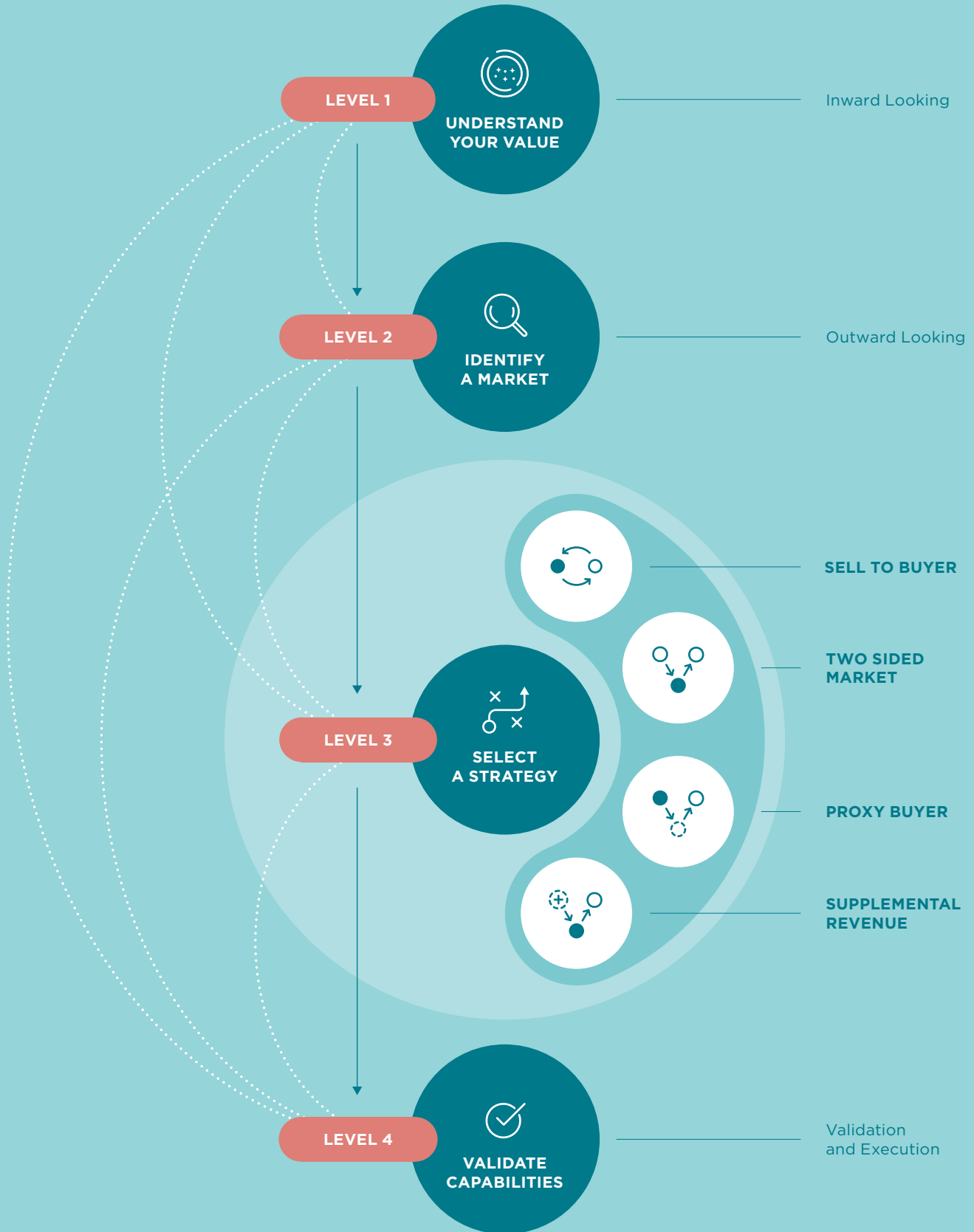
potential buyers. It is not enough for the innovator to be convinced of the value of the innovation. There will still be a long, frustrating period of sharing, explaining, negotiating and waiting for time consuming, slow procedures to be followed. The organisational structure must be ready for these challenges and new partnerships will need to be put into place.

Part 1 of this report provides a step-by-step guide to achieving each of these levels. Each level contains four steps, and each step includes a series of questions for the innovation team to consider.

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THE JOURNEY TO SUSTAINABILITY



TAKING THE JOURNEY

Creating a sustainable innovation is like setting up a business. It requires the innovator to perform many different tasks, taking progressive steps toward a viable revenue and operating model over time. The four levels have been selected to help focus attention on different aspects of this journey. For example, Level 1 is primarily focused on the innovation itself, while Level 2 is about the ecosystem of potential buyers.

While these levels are shown as a series of sequential steps, most innovators will take a less direct route to success. They may double back or repeat steps, or circumstances may result in doing the steps in a different order. This is fine. Innovators should maintain the ability to test, learn and adjust as they go forward. ■

Level 1

Understand your value

INTRODUCTION

The steps in Level 1 focus on the innovator and their innovation. A sustainable operation will require a well conceived innovation that has been effectively executed. However, this is not all that is necessary. The innovator must also generate evidence that the problem is important and that the innovation has an impact, as well as developing initial partnerships and relationships that will be of benefit at later stages of the journey. These foundational elements are particularly important in low-resource environments or when selling ‘public goods’ (see Level 2).

This foundation should be built during a pilot project. While a successful pilot does not guarantee success in scaling or sustainability, it will be very hard to take those journeys without delivering a solid performance in the pilot. Of course, the initial idea and pilot may experience many twists and turns. That’s expected and actually demonstrates strong innovation skills. However, as the pilot progresses, four key resources should emerge that can provide a foundation for the journey to sustainability: the problem that is being solved, a well-designed solution to that problem, evidence of impact and a complete, finalised innovation.

LEVEL 1

THE JOURNEY TO SUSTAINABILITY
UNDERSTAND YOUR VALUE

Dan McClure 2019

1.1 IS THIS AN IMPORTANT PROBLEM?

First, there should be an important problem at the root of every innovation. Innovators who begin with a 'solution' often fail to identify whose problem they are solving. It is important that the problem be linked to someone who cares about having it solved. This may be someone inside an organisation (so that the innovation solves an organisation's problem) or an individual living through a crisis. One of the key jobs of the piloting phase is to prove

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THERE SHOULD BE AN IMPORTANT PROBLEM AT THE ROOT OF EVERY INNOVATION. INNOVATORS WHO BEGIN WITH A 'SOLUTION' OFTEN FAIL TO IDENTIFY WHOSE PROBLEM THEY ARE SOLVING.

that the problem is big enough, and occurs frequently enough, that it matters to someone.

1.1 QUESTIONS TO ANSWER

To pass this step, innovators should be able to clearly answer these questions:

1. What problem is the innovation trying to solve?

2. Who cares about the problem?
3. How important is the problem to them?
4. How common is the problem?

1.2 IS THIS A WELL-DESIGNED SOLUTION?

Next, important problems need good solutions. The pilot process should validate that the problem actually exists and that the proposed design for the innovation can be effectively used to solve it. Since most innovations don't work on their first attempt, the innovator should plan to iteratively test, learn and revise both the design of their solution and the definition of the problem.

1.2 QUESTIONS TO ANSWER

To pass this step, an innovator should be able to clearly answer these questions:

1. How does the innovation solve the problem?
2. How does the user or beneficiary of the innovation define success?
3. Has the innovation's design been iteratively tested and refined to optimise the design?



Innovation team Shbabek at the Mahali Lab in Jordan conduct design research with youth to understand their biggest concerns, and ensure their innovation is solving the right problem. **ZAIN MOSTAFA/SHBABEK**

1.3 IS THERE COMPELLING EVIDENCE FOR THE SOLUTION?

There must also be evidence that the innovation works. For private sector business models that rely on commercial sales, the evidence of impact is typically linked to market acceptance. In other words, will anyone buy it? Simple sales tests are typically used by commercial entrepreneurs to gather this evidence.

For non-commercial innovations, where governments, NGOs or communities are the buyers, there will seldom be a 'marketplace' where buyers vote for innovations by buying them. Instead, innovators must persuade donors and funders that their innovation works and is important. It will be necessary to

gather evidence of the impact the innovation has on a recognised problem.⁶ For example, innovators might show how their innovation improves health outcomes for people living in crisis, even if those people can't afford to pay for the improvements themselves. This evidence should be gathered in the actual places where the innovation will be used, rather than only in 'laboratory' environments.

1.3 QUESTIONS TO ANSWER:

To pass this step, an innovator should be able to clearly answer these questions:

1. What evidence is there of the scale and importance of the problem?

6. Evidence alone will rarely be enough to convince an organisation to buy an innovation. The innovator also needs to understand how these organisations operate in a particular context, their existing partnership agreements, and how these might impact on the organisation's ability and appetite for uptake of an innovation. These are discussed in Level 4.



A final, complete solution will need to resolve challenges like finding field support and training, enabling the delivery of any supplies needed, and dealing with legal liabilities. Innovators will also need to be aware of potential barriers to acceptance, such as cultural barriers or legal restrictions. Innovations that plug into an existing system will find it easier to resolve these challenges. For example, an innovator selling their product directly to an NGO will not need to manage the transport and distribution of the product, while other innovators providing pioneering services within a local community may need to create much of the supporting ecosystem themselves.

It's not necessary to solve all these problems right away, but the innovation team needs to be aware of them. This allows them to assess whether the barriers and challenges can be addressed or whether they represent potentially fatal flaws.

1.4 QUESTIONS TO ANSWER

To pass this step, an innovator should be able to clearly answer these questions:

2. What evidence is there of the scale of the innovation's impact?
 3. How rigorous and thorough were the studies?
 4. Do the circumstances of the test (people, location) match where the innovation will be used?
1. What else will be needed to provide a complete solution that supports the implementation of the innovation?
 2. How many and how big are the remaining tasks to produce a complete solution?
 3. Do any of the remaining tasks require special skills or resources?
 4. Are there any barriers that need to be removed?
 5. How difficult will it be to remove the barriers? ■

1.4 IS A COMPLETE SOLUTION POSSIBLE?

During piloting, many innovators will make assumptions that allow them to simplify their testing and speed up the innovation's development. This is often a good strategy for testing new designs. However, at some point, it will be necessary to produce a complete solution that deals with all the difficult areas that were set aside during the early pilot work.

Level 2

Identify a market

INTRODUCTION

At Level 2, the innovator turns their attention to potential sources of funding. Even in resource-limited environments, there are often many types of funding sources. In fact, places with few commercial resources often offer the most complex range of choices for sustainable funding.

Identifying potential candidates for funding involves a series of decisions, with each choice exposing another branching set of choices. Ultimately, the innovator must identify what type of market their innovation serves, what level of revenue is possible, who can provide the revenue, and what is the best way to engage them.

There are three different forms of value exchange across three different 'goods' areas.

PRIVATE GOOD:

The 'market' provides in exchange for money.

PUBLIC GOOD:

Government and/or Donors provide and/or fund CSOs/NGOs to provide.

SOCIAL GOOD:

Individuals, families and communities provide for each other without the exchange of money.

- A **'private good'** is purchased by the people or organisations who need it for their own use. This might be anything from food for a household to HR software for a humanitarian organisation. It is simple because people pay directly for value. All the innovator needs to do is to persuade someone to spend their money. An example from the DEPP Labs of providing a private good is Twig, a Jordan-based mobile application that connects people who have agricultural skills with people who require gardening services such as landscaping or maintaining their gardens.

- A **'public good'** is provided to the public by a government or other institution. This includes services such as healthcare, education or flood control systems. What are seen

as public goods change from country to country. There are usually government or quasi-government institutions responsible for them, who could be 'proxy buyers'. An example from the DEPP Labs is the Bottle-Net Life Jacket. The jacket is made of plastic material and fishnets and will be sold to local government (and others) for distribution to people in flood-prone areas.

Selling public goods often requires more sophisticated business models, because there are multiple organisations involved and they are typically looking for different forms of evidence to justify a purchase. If the government or donor doesn't provide the service directly, they will often commission another agency to do it, such as a civil society organisation (CSO), NGO or social enterprise. The CSO/NGO/social enterprise therefore has two customers: their target user group and the government/donor. They need to demonstrate value to both of these groups.

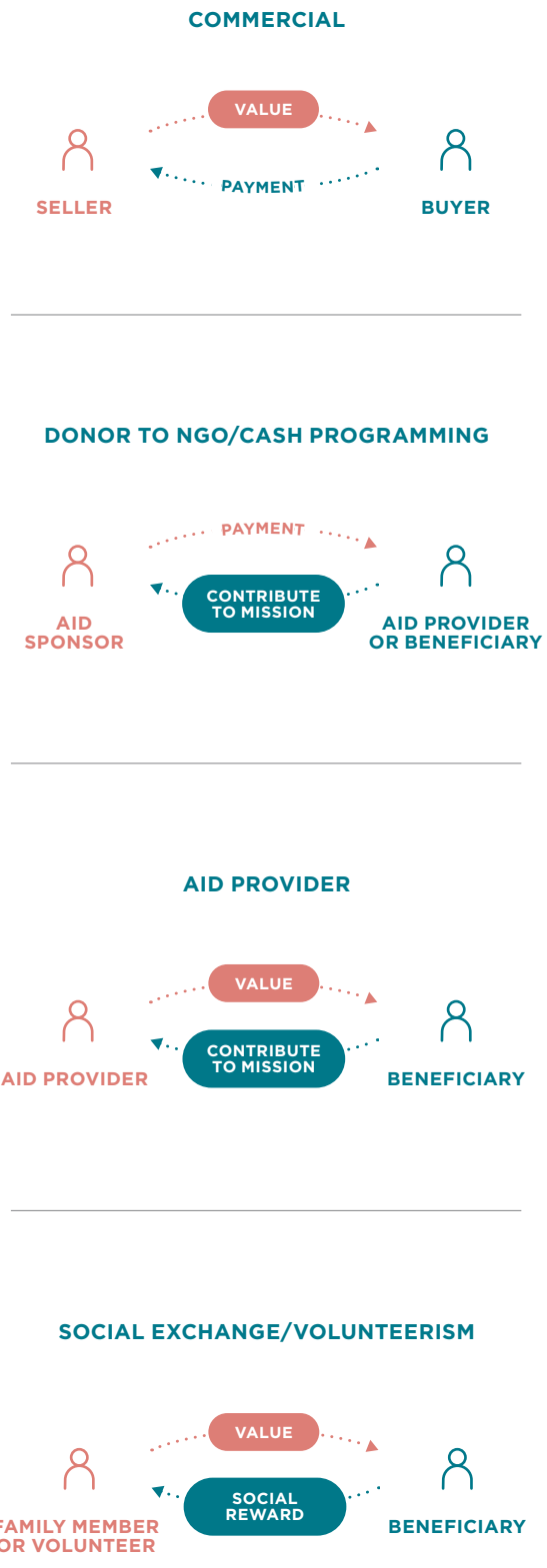
- A **'social good'** is where individuals, families or communities create value and provide solutions to each other without exchanging money. For example, households might provide accommodation to extended family members affected by a disaster. They use 'social capital' in exchange for these solutions.

It is critical that innovators think through what market their innovation serves in order to understand who they will be selling to, what the incentives are, how value is judged and what the purchasing process and patterns are (for example, whether demand is consistent or spikes after an emergency).

In most cases, there won't be a single answer to these questions. Different combinations of these choices can be explored to see what is most feasible for the innovation in the context where it will be used. This variety of choices can easily become overwhelming and confusing. A great deal of time can be wasted bouncing between half-thought-out strategies, so it's important to intentionally proceed through Level 2, fully describing each of the strategies under consideration.

Many forms of value* exchange

*value could be a product or service



LEVEL 2

THE JOURNEY TO SUSTAINABILITY
IDENTIFY A MARKET

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2.1 WHICH TYPE OF MARKET IS THIS?

As described in the introduction to Level 2, there are three major branches of revenue options:

- A **'private'** commercial marketplace where individuals and businesses pay for the services they need. This is where most product innovators expect to work. Their customers will pay to service their own needs.
- A **'public'** market where government agencies or civil society institutions like NGOs use public or donated money to purchase products or services in support of others.
- A **'social'** market where goods and services are traded among members of a family or community. Social markets are substantial, but often are hidden from the official buying and selling that occurs in both the public and private arena.

The choice of market may vary based on location and context. For example, in some countries healthcare is a public good provided by the government, while in others healthcare depends on private insurance. Again, in some locations, healthcare may primarily be delivered by family and community members in a social market. A crisis may shift the market too. For example, providing shelter would normally be considered a private good but in a crisis, shelter could become a public responsibility.

2.1 QUESTIONS TO ANSWER

To pass this step, an innovator should be able to clearly answer these questions:

1. If you think your good is in a **private market**:
 - a. Do the users of the innovation typically pay for this service or product?
 - b. Do the users of the innovation have money to pay for the service or product?
2. If you think your good is in a **public market**:
 - a. Does someone currently pay for this service or product on behalf of others?
 - b. Do the users of the innovation lack funds to pay for the service or product?
 - c. Are there special circumstances which affect when this is a public good?
3. If you think your good is in a **social market**:
 - a. Would people pay for the service or product if it were available as a private good? What additional value is needed for people to pay for the product or service?
 - b. Is there anyone who would support making this a public good?

- c. What form of value is exchanged among participants in a social market (for example, barter for other services or a gain in reputation from providing the service)?

2.2 WHO IS A VIABLE BUYER?

In any given market there may be a range of potential buyers for an innovation.

In a private goods market, a commercial product might be sold directly to customers, sold to a retailer (who resells it) or sold to a business that incorporates it within their product (business to business – B2B – sale). Each of these different buyers will have a different price point and goals for the sale, as well as different criteria for selecting potential suppliers.

Markets for public goods have even more options, and are often harder to navigate as a result. In the simplest version, the innovator provides products or services for **direct use** by the government or NGO. For example, if the innovation helps the government or aid workers to collect field data that will be used by their NGO or agency, then the buyer is the direct user of the innovation.

A more complex situation exists when the government or aid organisation is buying

products or services on someone's behalf, ie acting as a **proxy buyer**. This is a common path for innovators who have designed a solution for a disaster-affected community but the beneficiaries don't have the capacity to pay. It can also be appropriate when the innovation intends to provide a public good, such as improved education or vaccination services. In these cases, the innovator might:

- deliver their product or service directly to the affected populations using funding from a donor (or another organisation)
- sell their product or service to an NGO or government which then delivers it to someone in the community.

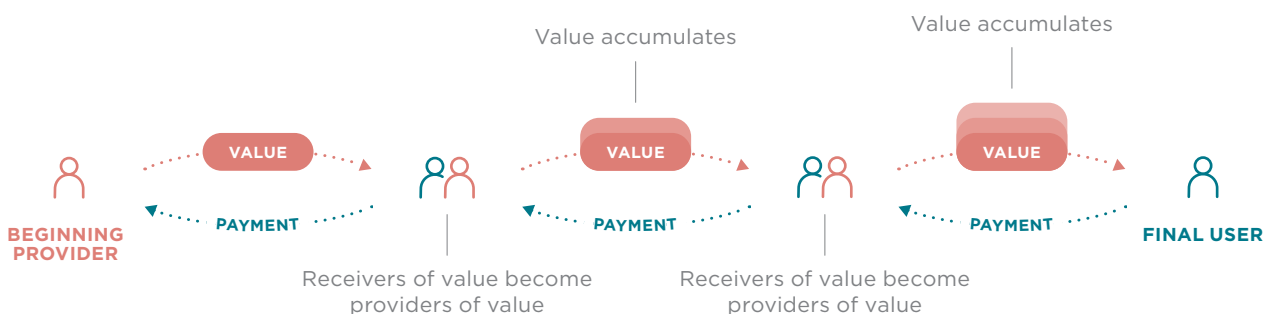
Before investing heavily in a particular target buyer, the innovator should verify that the buyer has the financial capability to buy the innovation.

2.2 QUESTIONS TO ANSWER

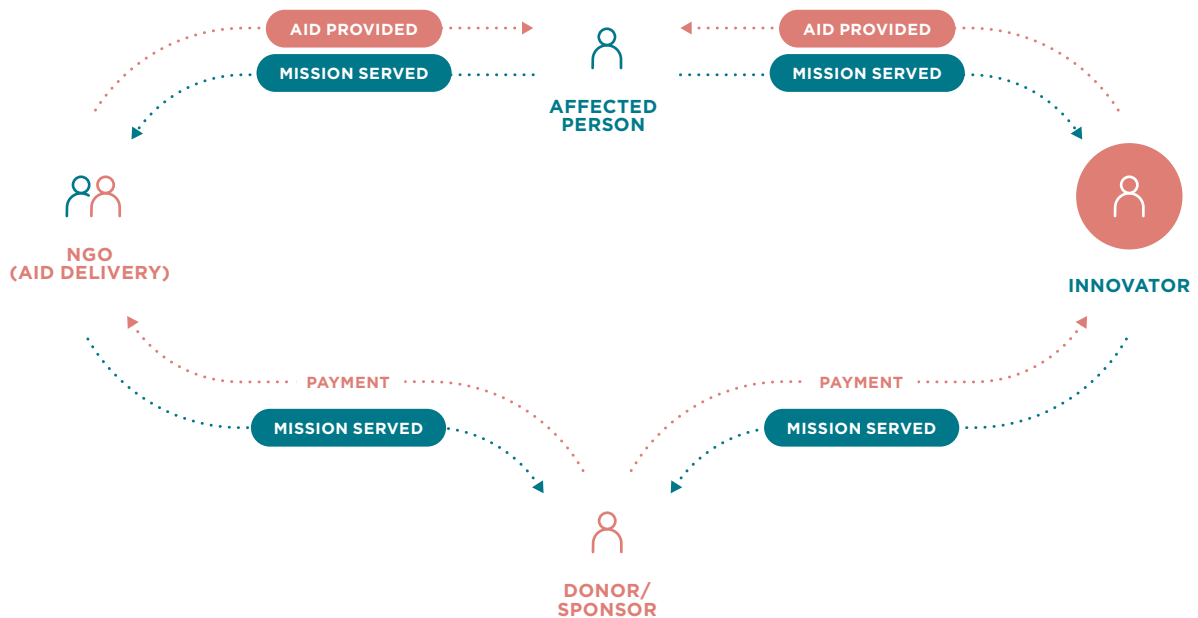
To pass this step, an innovator should be able to clearly answer these questions:

1. If you think your viable buyer is in a **private market**:
 - a. Which type of buyer do you propose to sell to (for example, end user, retailer, supply chain, producer)?

Example of a value chain



Competing with NGOs



- b. Do the proposed buyers see this as a priority for their spending?
- c. Do the proposed buyers have money to pay for the service or product?
2. If you think your viable buyer is in a **public market**:
 - a. What kind of buyer do you want to sell to (government, NGO, etc)?
 - b. Does the government or humanitarian sector actors recognise this problem?
 - c. Have they quantified the impact of the problem, to establish how urgent it is?
 - d. Are the proposed buyers buying for their own use, or are they a proxy buyer?
 - e. Do the proposed buyers currently fund other solutions to this problem?
 - f. What mechanism is used to fund solutions to the problem (innovation grants, humanitarian/government grants, humanitarian/government contracts)?
 - g. Is this funding stream(s) one that you might be able to access?

2.3 WHAT IS THE MARKET SIZE?

The size of the market determines the economic options available to the innovator, but a large need does not always translate into a large market. Innovators should see if there is a functioning market for similar types of products or services, and how many potential buyers exist.

It is also unlikely that a strong market need will be completely unmet. Usually, others will already have developed solutions that fill at least part of the need, although some competing solutions may look very different from the innovation you have in mind. For example, providing a cool place to rest might involve providing a fan to create a breeze ... or a chair under the shade of a tree ... or a cold drink. All three will compete to solve the same problem.

Some markets will be very crowded, while in others there will be few providers. An empty

market is not necessarily a good sign. If an important need exists and there are few providers, an innovator should take additional care to understand why the marketplace has failed to provide a solution.

2.3 QUESTIONS TO ANSWER

To pass this step, an innovator should be able to clearly answer these questions:

1. What is the size of the market (users and buyers)?
2. How crowded is the market with other providers for this service or product?
3. What percentage of this market can you feasibly sell to?
4. If there are few other providers, why hasn't the need been met?

consumers who have a limited ability to pay) and social enterprises. An inventory of specific models to consider is provided in Part 2.

2.4 QUESTIONS TO ANSWER

To pass this step, an innovator should be able to clearly answer these questions:

1. What is the expected price point?
2. What level of research has been done to validate the price point?
3. Is demand constant, or is it sporadic (for example, during the rainy season)?
4. How many purchases per time period can be expected for each buyer?

2.4 WHAT IS THE PRICE POINT?

The price point is determined by the value of the innovation to the buyer. Commercial startup incubators look for opportunities that have both large market size and high price points. These are extremely profitable opportunities which can drive large capital investments. In humanitarian and development settings, it is far more common to find low price point innovations. Here, buyers have a large number of needs and limited funding, so there is a pressure to keep prices low regardless of whether the innovator is selling directly to the user (NGO, government, community) or to a proxy buyer. Market research can be conducted to determine the approximate level of this price point.

Fortunately, an innovator may deliver low-price, low-margin solutions but still survive by selling large volumes in order to achieve the market value needed to cover costs. A larger market also allows the innovator to invest more in supporting services like training or customer service. In both the private and public markets, there are low margin/low price options such as bottom-of-the-pyramid strategies (selling to

Level 3

Select a strategy



INTRODUCTION

At this level the innovator knows about the value of the innovation and the market where they will need to operate. The choice now is to identify which selling and pricing strategies could be used to support the innovation over time. There are many different strategies that can be used to engage a particular buyer. A selection of common options are presented in the business model inventory in Part 2.

There is generally no single model that is clearly the best and only choice. Instead the combination of market, buyer, price point and size needs to be considered and then used to pick a business model strategy that works for those conditions. There will often be several models that could potentially work for a given innovation in a given context and in some cases several business models may be combined together.

Each of the steps in this level addresses a particular type of business challenge. The goal is not to select a final business model at this stage. Instead, the innovator will have an opportunity to think broadly about different options and select one or more strategies that might fit their circumstances. Once potential business model strategies have been selected, they will be tested and validated during Level 4.

LEVEL 3

THE JOURNEY TO SUSTAINABILITY
SELECT A STRATEGY



Dan McClure 2019

3.1 CAN YOU SELL DIRECTLY TO THE USER?

The first group of business models are the simple cases where the innovator sells directly to the person or organisation that will use their innovation. This is a common situation in private goods markets, where individuals or organisations select products and services that meet their needs and use their own money to purchase them. Two such strategies are presented in Part 2: pay-per-use and subscription models. The innovator’s key challenge is to engage with these potential customers, get them to try and use the innovation and then convince them to purchase again in the future.

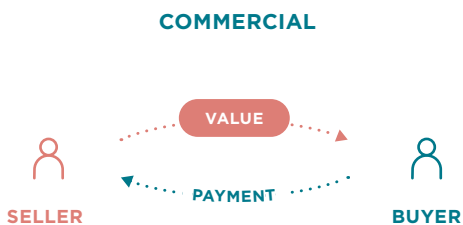
This contrasts with a retail pay-per-purchase model, where buyers pick a product from the shelf, or a subscription model where users are asked to pay monthly or annually for ongoing service.

Direct sales also occur in public markets when innovators sell a product or service directly to an NGO or government agency for its own use. For example, if an innovator sold a new mobile application for NGO or government field teams, that would be a direct sale. There may be added institutional barriers to accessing these buyers, which need to be overcome by active sales work.

3.1 QUESTIONS TO ANSWER

When selecting strategies in this category, innovators must consider the following questions:

1. Is there anyone besides the user who must approve or support the sale?
2. Does the user have enough money to pay for this innovation?
3. Can you access the users of this innovation and sell to them?
4. How will you convince them that this innovation is desirable and needed?
5. How will you retain buyers over time?



For example, many commercial services use a ‘freemium’ model to attract new customers. Initial services are provided at no charge, but a fee is charged for upgraded support once the user appreciates the value they are receiving.

3.2 CAN YOU SELL TO TWO-SIDED MARKETS?

In the second group of business models, two or more parties are needed to successfully make a sale. The examples provided in Part 2 are marketplaces and cooperatives.

In a marketplace, the innovator acts as a middleman. On one side a customer must make a purchase. On the other side, a supplier must provide a product or service. Suppliers must be willing to provide products and services that buyers want and at prices they will pay. Online platforms like Airbnb are examples of two-sided markets. As with direct sales, there is a need to reach new customers and retain them over time. However, there is also a need to make sure the 'supplier' side of the market is engaged. The innovator implementing this model must be able to grow both sides of their operation at the same time.

Other variations of this strategy occur when two or more parties must agree before a purchase can be made. In a cooperative model, for example, all the members of the cooperative may need to agree on a new product or price for a sale to be successful.

If they have conflicting needs, their interests will need to be balanced so that all will agree to the adoption.

3.2 QUESTIONS TO ANSWER

When selecting strategies in this category, consider the following questions:

1. Who is on each side of the market?
2. Do you have strategies for engaging participation on both sides of the market?
3. If one side of the market shows sudden growth, how will you grow the other side?
4. Are there any conflicts in the needs and requirements of the two sides of the market?
5. Who holds the legal liability when something goes wrong (you, or the supplier)? What is the resolution mechanism?
6. How will you get started, establishing enough participation on both sides of the market?



3.3 DO YOU NEED TO SELL TO A PROXY BUYER?

In the previous categories of business models, customers made purchases based on the direct benefit of the product or service; a good idea would naturally be rewarded with a growing number of buyers. In this group of business models, the proxy buyer (such as a government or NGO) purchases goods or services on behalf of a community that needs them.

Part 2 outlines two proxy buyer models, and highlights particular challenges in these strategies. These include the need to generate evidence of impact, and the difficulty and unpredictability of sales or grant cycles. In addition, since much aid funding passes through several organisations before reaching communities in a crisis, there may be several different proxy buyers that could purchase an innovation. The choice of which organisation to sell to will vary depending on the nature of the innovation and the role each organisation plays in the aid response. In some cases, it may

be necessary to work with international agencies or policy makers. In other cases it may be possible to engage directly with local NGOs operating directly with local communities.

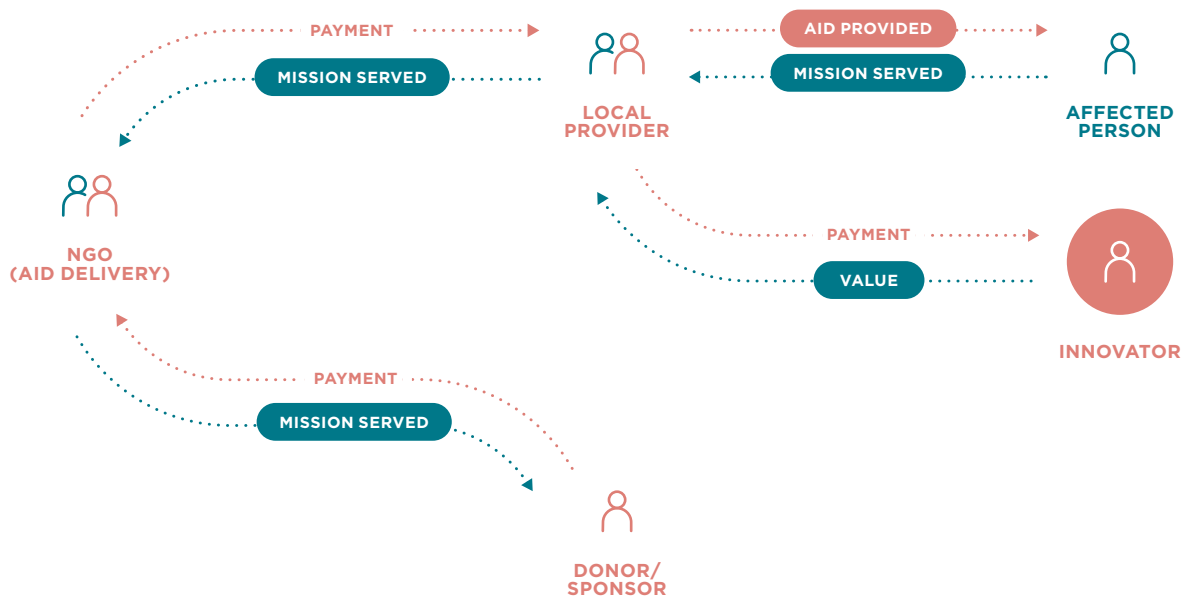
It is worth noting some developments that are shifting humanitarian aid away from proxy buying. For example, cash and voucher assistance (CVA) replaces the provision of services and products with cash cards given directly to community members. This puts more buying power directly in the hands of the people who receive the benefit, in effect changing a proxy buyer situation into one where innovators can sell directly to users.

3.3 QUESTIONS TO ANSWER:

1. Do the ultimate users of an innovation lack the money to pay for it? (If so ... proxy buying.)
2. Are the goods or services provided as a public right? (If so ... proxy buying.)

NGOs leveraging local providers

Selling to local providers



3. Who is the ultimate beneficiary? Who gets value from the innovation?
4. Who is sponsoring the purchase (the proxy buyer)?
5. Are there multiple parties involved in the proxy buying (eg, a sponsor, an NGO, a local agency)?
6. Do the proxy buyers recognise the issues the innovation addresses as important needs?
7. What evidence has been gathered to support your claimed impact?
8. Are there standards that restrict the use of new innovations by proxy buyers?
9. What are the requirements for selling to the proxy buyer?
10. Does the innovator have the time and resources to pursue a longer, more involved sales process?

3.4 CAN YOU OBTAIN SUPPLEMENTAL SUPPORT?

This is the last of the four different groups of business models. In this strategy, supplemental funding is used to augment and support a business model that would not otherwise be self-sustaining. There are a number of different strategies that can be applied to subsidise base funding levels (two of these are described in Part 2):

- **Social enterprise (lower profits):** The innovation generates low levels of revenue, which are sufficient to operate a supporting organisation but provide very limited profits. There are a growing number of investment funds that will provide capital or loans that recognise this limited ability to generate future returns.
- **Volunteers (lower cost labour):** The subsidy comes in the form of free or substantially discounted labour. This reduces the level of funding needed to sustain operations, but

also requires sustained volunteer commitment and enthusiasm.

- **Donated products or supplies (lower cost supplies):** A donation of products, facilities or supplies will also reduce costs. However, it may be difficult to align the products donated with the actual needs of the innovation. Products may also require supporting services such as training and maintenance that require additional investment.
- **Cash donations or crowd-funding (more funding):** Grant funding can be supplemented by cash donations, which have fewer restrictions on how they are used.
- **Subsidy from profitable operations (more funding):** Many commercial organisations use their profitable business operations to support social initiatives or less well funded activities. Toms Shoes, for example, supports social goals through its commercial shoe sales.

Some organisations are able to rely fully on a combination of these strategies but funding from subsidised sources is generally less predictable and more difficult to sustain than operational funding obtained through the previous categories of business model.

3.4 QUESTIONS TO ANSWER

1. What subsidised strategies might be available?
2. What base level of operational funding is available? What is the gap that must be filled by the subsidised source?
3. Can the innovator meet the requirements needed for subsidised strategy?
4. Can the subsidised source be sustained over time?





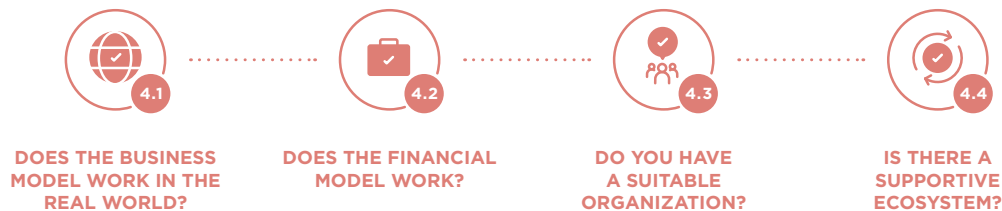
SolveX38, an innovation for an early flood warning system, is implemented and tested in a local village in Philippines that faces flash floods. **TUKLAS INNOVATION LAB**

Level 4 Validate capabilities

INTRODUCTION

Selecting a business strategy that aligns with the innovator's value proposition and market conditions is important, but not sufficient to assure success. There are many interconnected challenges that must also be addressed when implementing a sustainable business model. These include validating the effectiveness of the business model under real world conditions, and ensuring that the funding produced by the model is sufficient for operations. The innovator must also provide organisational support for the work, including an ecosystem of collaborators and partners. All of these activities will typically stretch the skills and resources of a fast-moving innovator or innovation team that has previously been focused on concept validation and piloting. This final level of the journey helps the innovator to implement the business model.

LEVEL 4

THE JOURNEY TO SUSTAINABILITY
VALIDATE CAPABILITIES

Dan McClure 2019

4.1 DOES THE BUSINESS MODEL WORK IN THE REAL WORLD?

The first step is to validate the business model within the chosen market. Implementing the selected business model is a difficult challenge and requires the innovator to test and validate several key assumptions. The first is that a promising business model will actually work in real world conditions. It may be necessary to repeatedly iterate the details of the model until the innovator develops an approach that customers will embrace. In other cases, entire business models may prove to be ineffective, so a new option will need to be selected and tested.

Validating the business model can involve talking to customers, doing market research, analysing sales data, and reviewing whether the solution actually solves users' and buyers' problems. It focuses on verifying:

- **Value:** Does the problem exist and does the innovation address it?
- **Price:** At what price point are buyers willing (and able) to pay?
- **Market size:** At what rates are customer relationships built and retained?
- **Workability:** Do the various parts of the operations work together successfully? For example, do the channels for producing, selling and supporting your innovation perform as expected?

- **Adoption:** Is the business model familiar to buyers? It will be more difficult to adopt business models that are new to an innovator or the regions where they work (for example, crowdfunding).

Note that if you have a two-sided or proxy buyer model, you need to validate your assumptions on both sides.

4.1 QUESTIONS TO ANSWER

1. Have you tested the assumptions and fit of your sales strategy?
2. Are there any parts of the business model that don't work? Which ones? Why?
3. Do you have any evidence that the innovation can grow its market share?
4. What limits the growth in market size (for example, operational challenges like infrastructure or supply chain limitations or a need for customisation)?

4.2 DOES THE FINANCIAL MODEL WORK?

Having validated the business model, the innovator must also make sure that the financial elements all fit together to support viable and sustained operations. It is not enough to have



some money. The innovator must also make sure that the funding arrives at the right times (without crippling gaps and delays) and that there is sufficient freedom to use the funding in the ways that are needed at that moment of growth and development. The challenges of inconsistent and tightly constrained funding are particularly troublesome in the public goods market.

- **Level of funding:** The most basic financial requirement is simply knowing that there is enough revenue to cover the full range of operating and management expenses. These include costs to support new

adoptions, fix problems, enable future development and pay a sustainable management team. The budget for an innovator's team and operation may need to adjust to the pattern and level of funding. However, there is a limit to how far these adjustments can go before the capacity of the team and the future of the innovation are put at risk.

- **Restrictions on the use of funding:** To scale up, innovators need general un-earmarked funding, but many grants for public or social innovations arrive with specific goals and constraints. There are several options available for dealing with this challenge,



The Bottle Net Life Jacket innovators in Philippines leverage the local women's association to produce their product for distribution, creating local income opportunities. **TUKLAS INNOVATION LAB**

such as pursuing funding that has fewer strings attached (such as sales), or reducing the levels of general operating expenses and pushing as many expenses as possible into targeted funding sources.⁷

- **Cash flow:** Grant funding is inherently intermittent and difficult to rely on as a

long-term revenue source (see the next point). 'Making the numbers work' is often more difficult in the humanitarian sector where funding streams are short term and dependent on specific crisis responses. Ultimately, the innovator must either find a stream of revenue that avoids gaps in funding or have a mechanism (perhaps

7. It may also be possible to combine and share an overhead expense and thereby make it something that can be recognised for grant funding. Innovation incubators and lab spaces are a great example of this. Instead of treating facility costs as overhead for a range of different innovators, the costs of a single incubator facility are shared among the group, with the incubator itself often able to attract funding support.

a line of credit) to deal with shortfalls when they occur.

- **Investing in growth:** Commercial investors provide early stage startups with funding in the expectation that their investments will be repaid, along with generous additional profit. In venture capital this profit is expected to be substantial, while in the field of impact investing, lower rates of return are expected because the benefits of the innovation are also taken into consideration. However, it is a mistake to think that impact funding can be accessed without a long-term model for generating revenue. Even impact investors will expect repayment. The repayment may occur over longer periods of time or at lower rates, but some form of revenue will eventually be needed.

4.2 QUESTIONS TO ANSWER

1. What level of general funding is necessary to support the innovation? Now? In the future?
2. Do planned operational costs include long-term management, funding for unexpected issues and support for future growth?⁸
3. How restrictive is the use of the funding?
4. How will you respond to gaps in funding, or funding that is declined? What are the risks to your customers if there are gaps in funding?
5. How will you find funding for ramping up operations before sales can catch up?

4.3 DO YOU HAVE A SUITABLE ORGANISATIONAL STRUCTURE?

Inadequate organisational support is a real danger, and one that can break up an innovator's team and sideline even the best new ideas. The challenges vary widely. Many new

innovators operate informally as a startup with next to no structure or processes and must build an organisation from scratch. Others working inside big organisations face the opposite problem, being part of established institutions with detailed processes and deeply embedded cultural rules that are difficult to change.

Organisational design is a very large subject area. However, it is useful to consider four organisational factors to start with:

- **Staffing:** The innovator may be a 'solo-preneur' or may have started to develop a fairly big team around them. Either way, they will need to assess the skills gaps in the team in relation to the proposed business model. How will the right skills and experience be recruited?
- **Culture:** Whether the innovator is starting out in an existing organisation, or building an organisation, culture is extremely important. To quote the management thinker Peter Drucker: 'culture eats strategy for breakfast.' The innovator should consider the type of culture needed to deliver the new business model. If the business model relies on partnerships, how can they build a partnering culture? If it depends on their own organisation, how will they maintain an entrepreneurial culture as the organisation grows?
- **Structure:** Organisational structures are not static, and should reflect the culture the innovator is trying to build. For example, if the innovator is trying to build an inclusive and independent working culture, then a flatter hierarchy will be a good idea. As the team grows, it will be necessary to diversify and to find ways of keeping members informed and engaged. Leaders will also need to be able to delegate to others. Innovators should think about what structure means in terms of the 'power' that job titles and management positions can bestow. Structure and culture need to work hand in hand.

8. A particular consideration for innovators working with vulnerable communities is the impact of a sudden drop of services. Contingency funding may be needed to prevent a sudden drop in medical supplies, for example.

- **Legal registration:** Different countries have different legal structures available. The two most common are for-profit companies and not-for-profit organisations. The costs of these options can vary radically, as do the legal and tax implications. If the innovator hasn't already registered as an organisation, they need to explore the pros and cons of the different types of legal registrations and structures available. For example, for-profit companies may have shareholders, and often have easier access to capital and investment. Not-for-profit organisations will require a governance board that ensures accountability to funders and is more likely to access grant funding. The proposed business model is therefore a critical factor in the choice of registration. For example, if the innovator is embarking on a 'bottom of the pyramid' strategy, then becoming a private company may well be the best route. If the innovator is aiming for government or donor grant funding, registering as a charity or civil society organisation may improve eligibility.

4.3 QUESTIONS TO ANSWER

1. Do you have a business team that can support and manage a sustainable operation?
2. Will the business model require you to change the number and type of staff you need?
3. Will the business model require you to change or build out a new organisational structure?
4. Does this proposed business model conflict with existing organisational culture?
5. If you are going to set up a new legal organisation, what type of legal structure should this be?

4.4 IS THERE A SUPPORTIVE ECOSYSTEM?

Innovators need to build a supporting ecosystem of partnerships and relationships

to help them execute their chosen business model. During a pilot it's easy to slip into the habit of working within a small team, perhaps reaching out to a few close collaborators. Settling for this narrow circle of partnerships and relationships misses the opportunity to begin building the essential relationships that will be necessary for a successful journey to sustainability. No-one creates a sustainable operation by themselves. Connections and relationships need to be built with those who will be essential later. Deliberately using the pilot to reach out and expand the network of partnerships can also increase the potential for future introductions to key buyers.

4.4 QUESTIONS TO ANSWER

1. What partnerships and relationships have been established during the pilot?
2. Do you know who you need to reach to make a sale?
3. How many relationships do you have with those who have access to funding?
4. What partnerships need to be developed to move forward with the business model? ■

PART 2

Business model inventory

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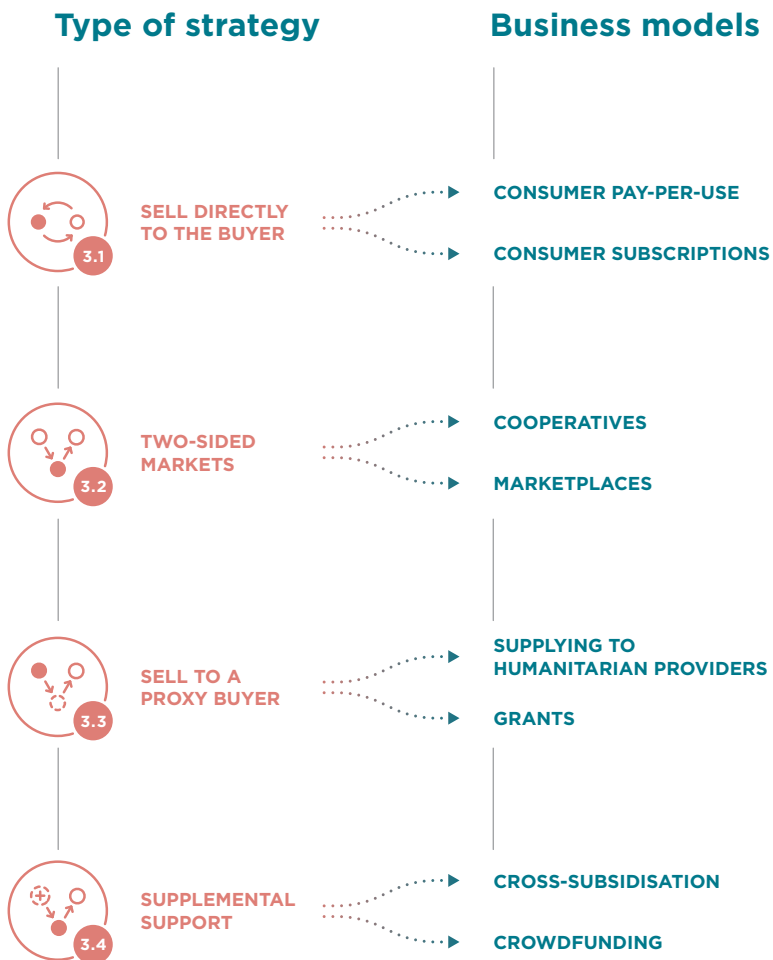
Eight business models relevant
for humanitarian innovation
in disaster-affected contexts.



OVERVIEW OF THE INVENTORY

Many possible business models have been successfully applied by innovators, but not all of these models are suited to a specific innovation. Like the innovation itself, the design of the business model should be tailored to specific needs, tested, and then iteratively adjusted. Ultimately the goal is to find a model that meets the needs of users and provides enough revenue to cover the cost of producing and developing the product or service.

The research carried out for this paper pointed to eight models of particular interest to humanitarian innovators working within disaster-affected communities. Each is described below, through a business model canvas, examples and descriptions of the benefits and constraints. They are numbered to reflect the information in Part 1 (Level 3).





The business model canvas

The business model canvas (Canvas 1) is a tool to help innovators understand business models in a straightforward and structured way. It was created by Alexander Osterwalder from Strategyzer. The canvas is a one-page document for an innovator to summarise their hypothesis for how they can take an innovation to customers and how they will pay for it. By summarising the essentials, it will be easier to identify the assumptions that need to be tested.

Filling out a business model canvas should be quick and easy. For each business model we've provided a description of the key questions to answer (the blue canvases). We've also provided some worked examples from real-life innovators at the DEPP Labs, showing the models applied in practice. (These canvases are in green.)

Canvas 1: Blank business model template.

KEY PARTNERS Who you need to work with in order to produce and deliver the solution.	KEY ACTIVITIES Core activities to meet the needs of your customers, suppliers and users.	VALUE PROPOSITION What problem do you solve, and how do you solve it?	CUSTOMER RELATIONSHIPS The types of relationships each customer segment expects you to establish and maintain; how these relationships can be established; how they can be integrated in the business model and their cost.	MARKET AND CUSTOMER SEGMENTS Who, and how many people will use your innovation (now, and over time)? Who will pay for your innovation?
	KEY RESOURCES Infrastructure to create, capture and deliver value.		CHANNELS Touchpoints for interacting with customers when they buy.	
COST STRUCTURE Key costs including upfront and recurring costs.			REVENUE STREAMS AND PRICING How you get paid for the innovation.	

We suggest starting with the 'value proposition', which describes how the innovation solves a problem, and filling in the canvas in the following order.

1 Value proposition

This requires you to summarise your vision. You should describe the problem you are solving and how you are going to solve it. You should describe the solution from a user's perspective and from the purchaser's perspective.

2 Market and customer segments

Who will use the innovation? Who will pay for it? List all the groups of people you are focusing on.

3 Channels

How will people buy your product or service? You want to find online or in-person channels that make it as easy as possible for your customers to buy.

4 Customer relationships

How do you communicate and build relationships with your customers and users? How do you explain to customers why your solution is the best for them?

5 Key activities

What activities must you do to produce, market and deliver your innovation? Focus on the key activities required to deliver your value proposition.

6 Key resources

What resources do you need in order to deliver your key activities? Again, focus on those things that are necessary to deliver your value proposition. Try to quantify the cost of each.

7 Key partners

Who are the individuals or organisations you need to work with? Are there key activities or resources that others can help you with?

8 Cost structure

How much will the activities, resources and partners cost you? Look back at each category and check that they are all essential costs. Try to quantify the cost of each.

9 Revenue streams and pricing

How will you get paid for your innovation? Does this amount cover your costs and leave you with enough money to grow the business or organisation?



Level 3.1

Strategies for selling directly to buyers

This section describes two models for selling directly to the buyer. The first is the pay-per-use model, where the customer pays for the product or service each time they need it. The second is a subscription model for regular payments.

3.1.a CONSUMER PAY-PER-USE/ PURCHASE (ONE-SIDED)

The simplest business models involve selling directly to the person or group using the innovation. In a pay-per-use model, the customer is charged every time they use a product or service.

The business model canvas (Canvas 2) illustrates the areas that should be considered to adapt this model for a humanitarian innovation. Each box provides guidance on how the model works and how it can be applied to specific products or services.

PAY-PER-USE/PURCHASE



EXAMPLE

An example of this business model is Medicine Bank in Jordan (Canvas 3), which buys diabetes and blood-pressure medication that will expire within six months and distributes them to pharmacies. These pharmacies sell

Canvas 2: Pay-per-use business model template.

<p>KEY PARTNERS</p> <p>Who you need to work with in order to produce and deliver the solution.</p>	<p>KEY ACTIVITIES</p> <p>Activities for:</p> <ul style="list-style-type: none"> • marketing • securing customers • product/service development and delivery • follow-up. 	<p>VALUE PROPOSITION</p> <p>The product or service should solve a demonstrated consumer problem.</p> <p>The value proposition should outline specific benefits such as:</p> <ul style="list-style-type: none"> • performance • quality • access • low cost • ongoing improvement plans of the product/service. 	<p>CUSTOMER RELATIONSHIPS</p> <p>Ensure that customers can purchase the product/service easily, ideally through channels they frequently use.</p>	<p>MARKET AND CUSTOMER SEGMENTS</p> <p>People in the disaster-affected community.</p>
	<p>KEY RESOURCES</p> <ul style="list-style-type: none"> • Marketing channels • Payment system 		<p>CHANNELS</p> <p>The product/service is distributed directly to users via your team (or an online application).</p>	
<p>COST STRUCTURE</p> <p>Costs for raw materials, resources, operational costs and customer acquisition costs.</p>			<p>REVENUE STREAMS AND PRICING</p> <p>Payments made by customers each time they use the product/service.</p>	

directly to Syrian refugees and vulnerable Jordanians at low prices and receive a commission for doing so.

✓
SUITABILITY

Four of the DEPP innovators involved in this study use direct sales in their business models. This business model is simple to test and is suitable for any innovators providing a product or discrete service directly to consumers.⁹

⚖️
BENEFITS AND CHALLENGES

This is a simple business model to implement and test, particularly when the product or service has a low barrier to entry. In these cases, customers can try the product or service without worrying about making long-term commitments. Because the innovator can

monitor increases and decreases in uptake, the model also provides easy insights into customer behaviours and service requirements.

The main challenge for innovators selling to disaster-affected communities is the communities' limited ability to pay. This is sometimes described as a 'bottom of the pyramid' strategy, which requires the product or service to be delivered at:

- low-price
- low-margin
- high-volume.

Other challenges and limitations include:

- **Cash flow.** In particular, the innovators we interviewed described delays between paying suppliers and being paid by

9. Revenue models—The pay-per-use model in the consumer media market, <https://www.marsdd.com/mars-library/revenue-models-the-pay-per-use-model-in-the-consumer-media-market/>.

Canvas 3: Business model canvas for Medicine Bank.

KEY PARTNERS <ul style="list-style-type: none"> Pharmacies that distribute the medicine Pharmaceutical companies with medicines close to expiry Ministry of Health National Pharmacy institute Legal advisers 	KEY ACTIVITIES <ul style="list-style-type: none"> Identifying and building new key partners Procurement of medicine Development of drug dispensing system Registration and legal requirements 	VALUE PROPOSITION <ul style="list-style-type: none"> Affordable: discounted at 50% of the sale price A trustworthy supply chain 	CUSTOMER RELATIONSHIPS <ul style="list-style-type: none"> Face-to-face appointments Feedback from patients 	MARKET AND CUSTOMER SEGMENTS <p>Vulnerable people in need of medication for illnesses such as diabetes.</p>
	KEY RESOURCES <ul style="list-style-type: none"> Drug dispensing system Storage facilities 		CHANNELS <ul style="list-style-type: none"> Pharmacies in beneficiary communities 	
COST STRUCTURE <ul style="list-style-type: none"> Labour costs for staff Fees for purchasing drugs System development and upgrading costs 			REVENUE STREAMS AND PRICING <ul style="list-style-type: none"> Drug fees 	

the customer. This can be particularly pronounced when the supplier is an organisation or government entity with slow payment terms.

- Small margins.** Innovators selling directly to disaster-affected communities will have restricted options for increasing prices. This means that they must sell large volumes in order to generate enough finance to cover costs.
- Capital for upfront or expansion costs.** With low margins, innovators selling directly to disaster-affected people may struggle to raise sufficient capital to cover their upfront costs. For example, Mt. Marsabit Women’s Dairy Group sells dairy products directly to consumers in the market and to a local government office. However, it does not have the capital it needs to purchase equipment that would allow it to automate its processes or to move into new locations.

3.1.b CONSUMER SUBSCRIPTIONS (ONE-SIDED)

A subscription model (Canvas 4) requires customers to pay a recurring fee in order to get access to a product or service on an ongoing basis. Payment for the product can be monthly, quarterly, biannually or annually. This model is suitable for innovators selling directly to users and where users pay the same amount over each time period, no matter how much of the product or service they use.



Canvas 4: Consumer subscription business model template.

KEY PARTNERS Who you need to work with in order to produce and deliver the solution.	KEY ACTIVITIES Activities for: <ul style="list-style-type: none"> • marketing • securing customers • product/service development and delivery • follow-up • regular support system to deal with any challenges that might arise. 	VALUE PROPOSITION The product or service should solve a demonstrated consumer problem. The value proposition should outline specific benefits such as: <ul style="list-style-type: none"> • performance • quality • access • recurring low cost • ongoing improvement plans. Subscription models also require: <ul style="list-style-type: none"> • continuous improvement to the product/service to keep users interested • opt-out options. 	CUSTOMER RELATIONSHIPS Marketing channels. Customers should be able to sign up to use the product/service easily, ideally through channels they frequently use. A subscription model involves a long-term relationship between owner and customer. Creating a positive customer experience is necessary for sustainability.	MARKET AND CUSTOMER SEGMENTS People in the disaster-affected community.
	KEY RESOURCES <ul style="list-style-type: none"> • Social media channels • Platform/process for product subscriptions • Easy and established payment systems (such as Mobile Money) • Efficient billing system that is accurate, easy to understand and adequately branded 		CHANNELS The product/service is distributed directly to the intended users through your team (or via an application): <ul style="list-style-type: none"> • Platform used to subscribe to the product/service eg website, an application, or in-person process • Customer care feedback channels 	
COST STRUCTURE <ul style="list-style-type: none"> • Costs for raw materials, resources, operational and technical costs, and customer acquisition costs. 		REVENUE STREAMS AND PRICING Subscription packages/recurring payments made by customers.		

☰ EXAMPLES

Kakuma refugee camp is located in Turkana County in north-western Kenya. Abdi is a Somalian refugee who has lived in the camp since 1996. He provides Wi-Fi connection

to other refugees at a rate of \$5 per month. Paying users are provided with a password, and the IP addresses of their devices are registered to allow them to access a signal. The price is competitive: mobile 3G subscribers can spend over \$10 per month for limited



Members of Mt. Marsabit Dairy Cooperative sell their goods in the local market in Marsabit, Kenya. MAARIFA KONA/J. MWAURA

packets of data but Abdi's internet limits downloads by speed, not by data volume.¹⁰

✓
SUITABILITY

None of the DEPP innovators interviewed for this paper had used a subscription model. However, this business model is suitable for innovators who can provide **reliable** access

to products or services over a long period of time. It is particularly suitable for innovators who want to charge a flat rate regardless of how much of their product a person uses. For this reason, many subscription businesses sell digital products (such as access to a website) and operate over the internet. However, the previous example shows that it is also suitable for in-person purchases.

10. Refugee Innovation: Humanitarian innovation that starts with communities, Pg. 28



productive since new orders do not have to be solicited from existing customers.

- Businesses build a relationship with the customer over a period of time. This allows them to get to know the customer well and to develop tailored upgrades and solutions for them.

Challenges and limitations documented by community-centred innovators include:

- **Support.** Costs associated with running a platform, including a regular (perhaps 24-hour) support system.
- **Buyer willingness.** Customers may be put off by the long-term commitment of this model. ■



BENEFITS AND CHALLENGES

Benefits of this model include:

- Predictability of revenue each month, as customers make payments on a regular basis.
- Predictability of demand and supply. This helps with consistency as appropriate services (eg vendors) can be procured in advance which saves time, effort and costs. This in turn makes businesses more

Level 3.2

Strategies for selling to two-sided markets

In some cases, the innovator is an intermediary between their suppliers and their customers. This section describes two models where the innovator must balance the needs and demands of both their suppliers (or members) and their customers.

3.2.a COOPERATIVES (TWO-SIDED MODEL)

A cooperative is owned and managed by members with similar values aimed at meeting their needs (economic, social and cultural) and might extend to meeting the needs of the local/surrounding community. There are various types of cooperatives, including:

- **Consumer cooperatives**, owned by members who buy goods and services from the cooperative.
- **Producer cooperatives** where members produce, process and market their commodities or crafts. Producer cooperatives are mainly in the agricultural sector, eg forestry, farming or fishing.
- **Worker cooperatives** where members come together from the same profession in order to own and democratically govern the business.
- **Credit unions** where members deposit money to the union and receive financial

Canvas 5: Cooperative business model template. This canvas, along with Canvases 7, 8, 9 and 11, is drawn using the social business model canvas. For more information see: <http://www.socialbusinessmodelcanvas.com/>.

<p>KEY RESOURCES</p> <p>Material/equipment to develop the product or service.</p>	<p>KEY ACTIVITIES</p> <p>Regular member meetings.</p> <p>Activities for:</p> <ul style="list-style-type: none"> • marketing • securing customers • product/service development & delivery • follow-up. 	<p>TYPE OF INTERVENTION</p> <p>Format of intervention eg product/service, workshop.</p>	<p>SEGMENTS</p> <p>Beneficiaries who include:</p> <ul style="list-style-type: none"> • members • affected community. 	<p>VALUE PROPOSITION</p> <p>The product or service must meet the needs of:</p> <ul style="list-style-type: none"> • members • users.
<p>PARTNERS AND KEY STAKEHOLDERS</p> <p>Who you need to work with in order to produce and deliver the solution.</p>		<p>CHANNELS</p> <p>Communication to members, eg, through email, telephone, social media.</p>	<p>CUSTOMER</p> <p>Members of the cooperative. If it is a social cooperative, it might include the local community.</p> <p>Purchasers in the affected community or host community.</p>	<p>IMPACT MEASURES</p> <p>Indicators that show you are creating a social impact.</p>
<p>COST STRUCTURE</p> <ul style="list-style-type: none"> • Costs for resources, operational and technical costs, and customer acquisition costs 		<p>SURPLUS</p> <p>Where profits will be invested.</p>	<p>REVENUE</p> <ul style="list-style-type: none"> • Contributions from members • Sale of products/services to members • Sale of products/services to users 	

services. Members decide on how the money collected is used. Common uses of unions are loans to members or purchasing collective property.

- **Social cooperatives** aimed at providing social services to their communities, such as improving health care.

☰
EXAMPLES

Cooperatives can be financed in a variety of ways, including user charges, selling to donors and selling to government departments.

Drought Cure, for example, makes animal feed using locally available raw materials.

The cooperative has 42 registered members: 25 women and 17 men. Members provide a monthly contribution of 100 Kenyan Shillings (equivalent to \$10) and volunteer to make the produce. Additionally, members who have live-stock buy the produce made by Drought Cure.

✓
SUITABILITY

The cooperative model has been widely used for small businesses and savings groups worldwide, including in crisis-affected communities. This business model is suitable for innovators who have a cause that can rally members within the community. Two of the nine innovators we interviewed practise this model: Mt Marsabit Women’s Dairy Group and Drought Cure.



BENEFITS AND CHALLENGES

The main benefit of this model is that the business is owned by members, who might also be the consumer of the product/service, meaning they have an added incentive to ensure its success. Other benefits are:

- Decisions are reached democratically and each vote on a decision is equal – none carries more weight than another.
- The business is owned and controlled by members rather than investors, which can allow for greater autonomy.

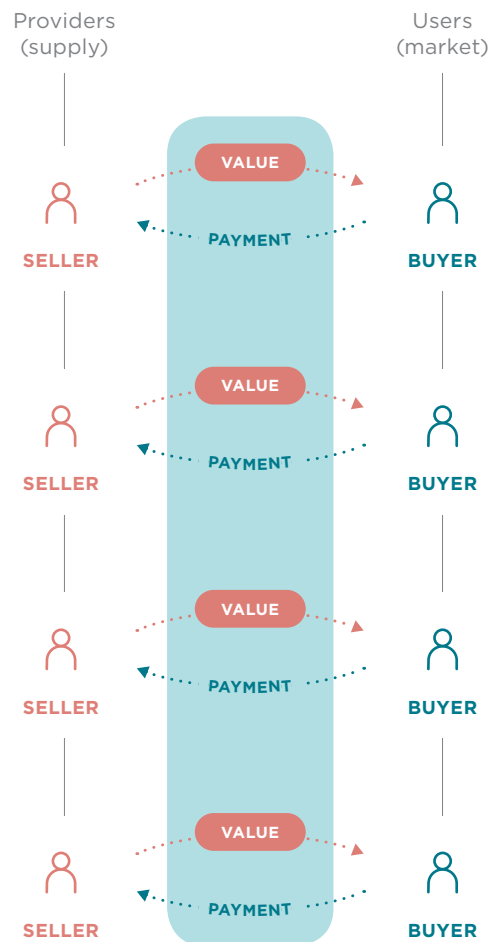
Some of the challenges and limitations faced by innovators using this model are:

- **Participation.** Success of the cooperative greatly depends on membership and participation. If the cooperative has few members, or inactive members, its operational capacity will be reduced.
- **Investment.** The structure of cooperatives may deter funding by investors because investing heavily in cooperatives does not translate into greater decision-making power. However, cooperatives may benefit from investors in instances of slow cash flow.
- **Multiple models.** Contributions from members may not be sufficient to run the business, particularly in the early stages when sales are low. Supplementary models may be needed.

3.2.b MARKETPLACES (TWO-SIDED MODEL)

This is a business that brings the buyer and seller together through a platform. The marketplace is a two-sided model, but the value you create is in providing a platform for buyers and sellers to come together, rather than selling to one side while providing value to the other. Popular examples of this business model include Uber and Airbnb.

Marketplaces where value is exchanged



EXAMPLES

Twig, based in Jordan, practises this revenue model. Twig is an application that connects people who have skills and experience in the agricultural sector with people who require gardening services such as landscaping or maintaining their gardens.



SUITABILITY

This business model is suitable for innovators who have identified a gap in access to markets for consumers, along with a high demand for certain products or services that are provided by a certain group of suppliers. Most marketplaces are run through online platforms that allow for information sharing.

Canvas 6: Marketplace business model template.

KEY PARTNERS Who you need to work with in order to produce and deliver the solution.	KEY ACTIVITIES <ul style="list-style-type: none"> Platform development and management Marketing the platform Customer support 	VALUE PROPOSITION For the supplier – readily available and accessible market. For the consumer – readily available and rated service providers; transparent rates.	CUSTOMER RELATIONSHIPS <ul style="list-style-type: none"> Social media Customer support Feedback system 	MARKET AND CUSTOMER SEGMENTS Suppliers and people who need the product or service.
	KEY RESOURCES <ul style="list-style-type: none"> Platform to host the marketplace Suppliers of the product or service 		CHANNELS <ul style="list-style-type: none"> Marketplace platform 	
COST STRUCTURE <ul style="list-style-type: none"> Costs associated with running the platform Operational and technical costs, and customer acquisition costs 			REVENUE STREAMS AND PRICING <ul style="list-style-type: none"> Commission on each product or service sold 	



BENEFITS AND CHALLENGES

The benefits of this model are:

- The platform brings together suppliers and customers, which means the owner doesn't have manufacturing and staffing costs. The only costs they incur are with running the platform.
- The platform owner does not concern themselves with delivery, warehousing, logistics or return policies as these are the concerns of the sellers.
- Competition among service providers works to the advantage of the marketplace owner as they can have many competitive sellers on the platform, attracting more consumers and increasing the customer base for the platform.

Some of the challenges and limitations faced by innovators using this model are:

- Restrictions.** There is potential for conflict between marketplace company owners and

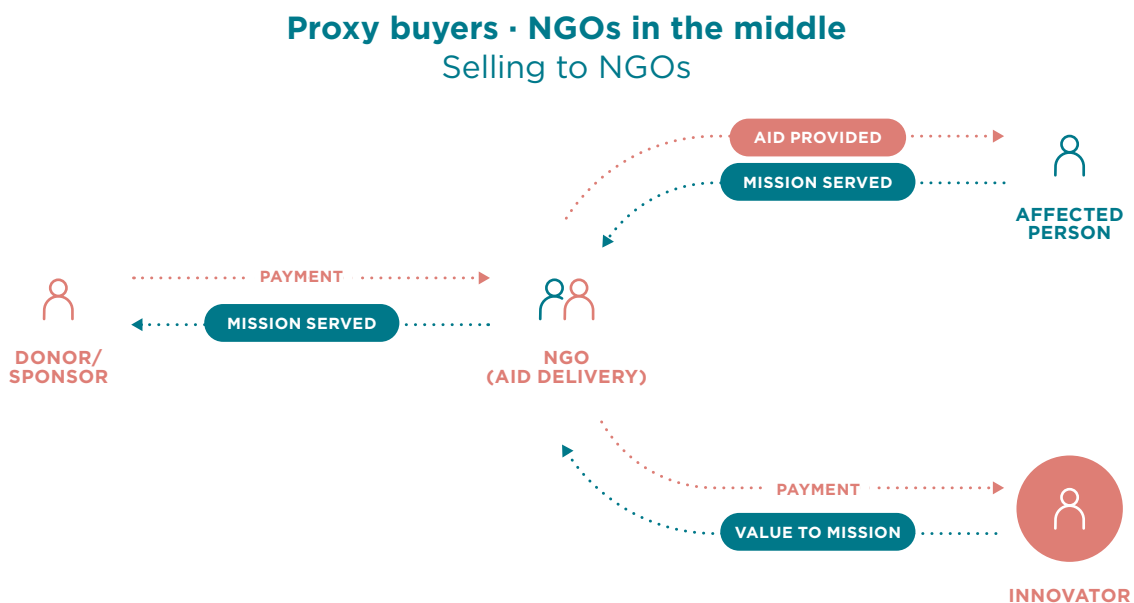
sellers regarding how a product is presented. For example, sellers may want to use their own designs to attract customers but marketplace companies might be restricted by rules and regulations that govern online ecommerce.

- Ownership of risk and liability.** For example, some marketplace platforms have a centralised customer feedback mechanisms for complaints. For others, unhappy customers lodge their complaints directly to the seller.
- Supply and demand do not always match.** There may be insufficient numbers of buyers or sellers to meet demand. Buyers may opt to use other platforms, leaving the marketplaces with unsold goods. In most cases this will require a critical mass of customers and suppliers early in the life of the initiative. Then as growth occurs, both sides of the initiative must grow together.
- Trust.** Customer trust in the marketplace is quickly lost if products or services do not match what was advertised.

Level 3.3

Strategies for selling to proxy buyers

When people within a community are not able to pay for an innovation, alternative buyers are needed. The next two examples are two-sided models that involve selling to an NGO, government or other humanitarian organisation.



Canvas 7: Humanitarian provider business model template.

KEY RESOURCES <ul style="list-style-type: none"> Raw material to develop the innovation Transport options Networks and connections within the aid sector 	KEY ACTIVITIES <ul style="list-style-type: none"> Government or NGO procurement process Product/service development and delivery Follow-up 	TYPE OF INTERVENTION Product or service humanitarian institutions are unable to supply themselves.	SEGMENTS Users: People in the disaster affected community and/or host community.	VALUE PROPOSITION A product or service needed by the community that isn't produced/offered by the aid provider. Ethical considerations, ie neutrality and no conflict of interest ^a .
				IMPACT MEASURES Comparative advantage over suppliers, such as value for money, or quality of product.
PARTNERS AND KEY STAKEHOLDERS Who you need to work with in order to produce and deliver the solution.		CHANNELS Formal communication mechanisms such as email or phone calls.	CUSTOMER <ul style="list-style-type: none"> NGOs Government departments 	CUSTOMER VALUE PROPOSITION Availability of product or service needed by the target population. Ability to meet compliance and procurement requirements and standard operating procedures.
COST STRUCTURE Costs for raw materials, resources, operational and technical costs, and customer acquisition costs.		SURPLUS (OPTIONAL) Where profits will be invested, if operating as a non-profit.	REVENUE Fee paid by the NGO or government.	

- a. This is particularly important in humanitarian settings. The humanitarian principle of independence means that suppliers should treat all parties in the same way.

3.3.a SUPPLYING TO HUMANITARIAN PROVIDERS (PROXY BUYER)

This is the first of the proxy buyer models. It involves selling aid (both as products or services) to an NGO or local government that is then used as part of their own response. This business model is relevant for innovators who can provide a product or service to humanitarian institutions that are unable to supply it

themselves. It requires good connections and networks within these institutions.

EXAMPLES

Three of the innovators included in this study had aspects of this model in their plan. For example, the Bottle-Net Life Jacket (Canvas 8) is an innovation developed by university teachers and students in Philippines who

Canvas 8: Business model canvas for Bottle-Net Life Jacket.

<p>KEY RESOURCES</p> <p>Raw materials for life jacket, eg nets and plastic material.</p> <p>Sewing machines.</p>	<p>KEY ACTIVITIES</p> <ul style="list-style-type: none"> • Prototyping, testing and producing the jacket • Meetings with government institutions, NGOs and companies • Accreditation process 	<p>TYPE OF INTERVENTION</p> <p>Life jacket made from plastic materials and nets.</p>	<p>SEGMENTS</p> <p>People in coastal areas affected by flood related disasters.</p>	<p>VALUE PROPOSITION</p> <p>Good quality life jacket that:</p> <ul style="list-style-type: none"> • saves lives • has 20–48 hours of buoyancy and a 7-year life span • is cost efficient – 600 pesos compared to commercial jackets priced at 2,000–2,500 pesos
<p>PARTNERS AND KEY STAKEHOLDERS</p> <p>University innovator.</p> <p>Government for feedback and accreditation.</p> <p>Possible funding partnerships with:</p> <ul style="list-style-type: none"> • donors/investors • NGOs • corporate entities. 		<p>CHANNELS</p> <ul style="list-style-type: none"> • Local markets • NGO and government dissemination points 	<p>CUSTOMER</p> <ul style="list-style-type: none"> • NGOs • Government • Corporate/commercial entities 	<p>IMPACT MEASURES</p> <ul style="list-style-type: none"> • Number of jackets distributed and in use with case studies • Number of areas of reduced plastic pollution • Number of people employed to make the jackets <p>CUSTOMER VALUE PROPOSITION</p> <ul style="list-style-type: none"> • Affordable life jacket that saves lives and preserves the environment
<p>COST STRUCTURE</p> <ul style="list-style-type: none"> • Staff costs • Equipment costs eg sewing machines 	<p>SURPLUS</p> <p>Buying equipment, eg a sewing machine.</p>	<p>REVENUE</p> <ul style="list-style-type: none"> • Direct sales of life jackets at 600 pesos per jacket • Donations and grants for initial capital and development costs 		

made a life jacket using materials within their community: plastic material and fishnets. The country experiences many disasters that cause flooding and yet many people cannot afford the expensive commercially available life vests. The developers of this innovation have been able to fine tune it with feedback not only from the local community but also from government institutions like Philippines coastguard and Barangay officers. The innovators hope to sell their life jackets to the local government

(and others), who can then distribute them to people that need them.

✓
SUITABILITY

Like all two-sided models, innovations using this model need ongoing consultation with the target purchaser. This ensures that the innovator understands how the purchaser's needs are met through the value proposition.



BENEFITS AND CHALLENGES

Some of the benefits of this model are:

- Recurring contracts in this model provide a consistent source of income and capital.
- Because the business supplies the product or service to the humanitarian organisation, this can simplify storage or distribution.

Some of the challenges and limitations of this model are:

- **Evidence.** A proxy buyer will normally require (or gather themselves) evidence that the product or service delivers impact. This evidence is required both during the initial purchase (is there evidence that the innovation delivers impact?) and after the sale is made (is there evidence that the innovation delivered on its promises?).
- **Not valued.** There will be cases where issues that are important to affected populations are not recognised by the proxy buyer. In these cases, the innovators will need to gather and disseminate evidence that the problem is important.
- **Access to buyers.** Innovators need to develop and maintain a wide network of potential NGO, government or other buyers through ongoing discussion.
- **Transparency.** Government (and other) procurement processes can be affected by corruption or nepotism.
- **Timing.** Sales cycles for proxy buyers are often longer and more unpredictable than direct sales, which makes it harder to predict long-term funding streams. In addition, the intermittency of many emergencies means that sales to proxy buyers may be irregular and unpredictable.
- **Bureaucracy.** There are often formal barriers that innovators must overcome to qualify for consideration by potential buyers. For example, an innovator may need to demonstrate several years of business operation, provide audited books or have certain legal registration in place. Even

when these preconditions can be met, there are frequently highly structured and demanding proposal and bidding processes that must be followed.

- **Additional stakeholders.** When selling to a proxy buyer, the innovation must be developed in line with the buyer's plans and needs (as well as the community's).

3.3.b GRANTS (PROXY BUYER)

Grants are sums of money awarded by governments, foundations, institutions, companies or NGOs to serve a specific purpose or goal. They are given without the expectation of repayment and without any requirement to provide equity in a business. They normally require a time-consuming application process and last for a specified period of time. Innovation grants can assist with setting up a new idea or business. Longer-term grant funding requires established relationships with donors and an ability to generate evidence of social impact.

EXAMPLES

The GEF Small Grants Programme provides grants of up to \$50,000 directly to local communities including indigenous people, community-based organisations and other non-governmental groups. Grants are provided for projects in biodiversity, climate change mitigation and adaptation, land degradation and sustainable forest management, international waters, and chemicals. Grants are usually given to NGOs and community based organisations (CBOs) but GEF has developed flexible project preparation and design processes to help smaller organisations. These include giving small planning grants to communities to support proposal development and accepting different proposal formats such as participatory videos and photo stories in lieu of written proposals where necessary. In 2013, the programme awarded Okombahe Community based Drip Systems (Namib Desert) in Namibia \$45,000 to set up 30 micro-drip irrigation systems at household levels in order to increase food security and income generation. The beneficiaries received basic

Canvas 9: Grant funding business model template.

<p>KEY RESOURCES</p> <ul style="list-style-type: none"> Raw materials Equipment 	<p>KEY ACTIVITIES</p> <p>You will need extensive time for:</p> <ul style="list-style-type: none"> identifying grant opportunities that fit your needs submitting detailed applications identifying matched funding opportunities to cover other costs monitoring and evaluation delivering the innovative product or service. 	<p>TYPE OF INTERVENTION</p> <p>Product or service that solves a humanitarian problem.</p>	<p>SEGMENTS</p> <p>Your particular target group in the disaster affected community. You'll need to justify this choice of customer segment to the funder. Consider:</p> <ul style="list-style-type: none"> target location coverage of that location how you reach the most vulnerable members of the community. 	<p>VALUE PROPOSITION</p> <p>How the problem is solved for the affected group.</p> <p>IMPACT MEASURES</p> <p>You'll need to provide data to the funder showing:</p> <ul style="list-style-type: none"> why people from the community need your innovation its comparative advantage compared to other similar products or services.
<p>PARTNERS AND KEY STAKEHOLDERS</p> <p>Government for feedback and accreditation.</p> <p>Possible funding partnerships with:</p> <ul style="list-style-type: none"> donors/investors NGOs corporate entities. 		<p>CHANNELS</p> <ul style="list-style-type: none"> The product/service is distributed directly to the intended users through your team Grant application Due diligence process Delivery of your innovation to users Evidence and reporting process 	<p>CUSTOMER</p> <ul style="list-style-type: none"> Local or national government Large NGO Institutional donor. 	<p>CUSTOMER VALUE PROPOSITION</p> <p>You will need to provide the funder with:</p> <ul style="list-style-type: none"> due diligence, including proof of finance, compliance, and reporting systems that meet their standards institutional experience and capacity to deliver the product or service evidence of project outputs stories of impact.
<p>COST STRUCTURE</p> <ul style="list-style-type: none"> Costs for raw materials, resources, operational and technical costs, and customer acquisition costs 	<p>SURPLUS</p> <p>Investment of profits.</p>	<p>REVENUE</p> <ul style="list-style-type: none"> Low fee paid by the user (this may be zero) Grants 		

compost and training in vegetable production and marketing, along with training on the drip systems and irrigation.



SUITABILITY

This business model is suitable for innovators delivering products or services directly to the

community and where the humanitarian system in the region already delivers these types of services (such as shelter or education). Four of the nine innovators we interviewed are exploring grant funding models.

All of the DEPP innovation lab grantees featured in this research have received grant-based innovation funding from DEPP. However,

some organisations may also develop a sustainable income from standard humanitarian grants alone or by subsidising grant funding with direct sales.

This model is advantageous because:

- the money awarded is 'free' so there are no repayment requirements.
- the business owner does not have to put up any collateral or shares in exchange for funds, so they retain ownership of the business.
- winning grants, especially from notable organisations, can give the business credibility and visibility which can enhance its prestige.

Nevertheless, our interviews highlighted some significant challenges and limitations:

- **Competition.** Grants are usually competitive and there may be tens to hundreds of applications from competitors for the same funding.
- **Lack of alignment.** Grants are usually made available for a particular purpose or activity that the donor is trying to encourage. This means grants won't necessarily be available strictly on the basis of market research or community assessment. Additionally, the focus or thematic area might not align with the innovator's idea. The innovator can consider reworking the idea but it might change the original vision and so affect an integral part of the innovation.
- **Lack of flexibility.** Most grants are not flexible so funding might be tied to specific activities and actions made in the original proposal, whereas businesses require the flexibility to change strategy to suit the current climate.
- **Approval processes.** The approval process might involve several stages, which may cause a delay in the start of activities.
- **New capabilities.** The innovator will need to develop capabilities in quantifying their outputs and outcomes, and evidencing their management capabilities.

- **Monitoring and evaluation.** With grant funding, the innovator becomes responsible for what happens when people use their service or product. They will need to monitor, evaluate and document the impact that the product or service has on the people that use it. ■

Level 3.4

Strategies for supplemental support



In cases where there is no established market, the innovator will need to find ways of creating new opportunities. The next examples are two-sided models that have proven value in the commercial sector, but have not been widely tested in the humanitarian sector.

3.4.a CROSS-SUBSIDISATION (ALTERNATIVE TWO-SIDED MODEL)

Cross-subsidisation is where a business uses the profits generated from one product or customer segment to support another product.



EXAMPLES

The business model can result in two different pricing models:¹¹

- **Provide the same product to all customers; use different price models depending on people's ability to pay.** Dial 1298 is an ambulance service based in India that serves groups at all income levels. The ambulance fee for patients being taken to private hospitals subsidises the fee for patients being taken to government hospitals.
- **Provide different products to different customers; use the revenue from one product to subsidise the other.** d.light is

11. (Jahani and West 2015).

Canvas 10: Subsidisation business model template.

KEY PARTNERS Who you need to work with in order to produce and deliver the solution.	KEY ACTIVITIES <ul style="list-style-type: none"> Product(s) development and management Marketing the product(s) Feedback and customer support 	VALUE PROPOSITION Your innovation must provide value to two customers. <ul style="list-style-type: none"> Customer feels buy-in; perceives product as high quality, meeting expectations of premium price Product meets practical needs of affected-community (eg longevity) 	CUSTOMER RELATIONSHIPS You distribute your product or service directly to the users. Users pay a reduced fee (which may be \$0) for the product or service.	MARKET AND CUSTOMER SEGMENTS You will have two categories of users - one group who can pay a higher price and a second group that pay at a reduced price or \$0.
	KEY RESOURCES <ul style="list-style-type: none"> Available market for the higher priced product 		CHANNELS The product or service is distributed directly to two sets of intended users through your team. You will need: <ul style="list-style-type: none"> market research delivery of the innovation to users user feedback. 	
COST STRUCTURE <ul style="list-style-type: none"> All costs associated with developing the products and services for both user groups 			REVENUE STREAMS AND PRICING <ul style="list-style-type: none"> Fee from the higher priced product Fee from the low priced product Funds from investors, partnerships and donation 	

a social enterprise that offers upgraded products (solar-powered lights and power systems) to subsidise more basic products for 'bottom of the pyramid' consumers.

The Community Volunteer Team (CVT) in Bangladesh has considered adopting a similar model. The innovation is providing fire training for a group of volunteers in Korail slum so that the community is well prepared when fires break out. This model may be cross-subsidised by offering fire training to garment factory owners, who have the ability to pay.



SUITABILITY

This business model is suitable for innovators who are able to deliver two different products:

one for commercial purposes and the other to serve the needs of a community. This requires the innovator to be located in an area where the community is agreeable to differential pricing or to have access to a premium market (for example online).



BENEFITS AND CHALLENGES

The main advantage of this business model is that the business does not have to look externally for financing for the lower priced product or service.

Challenges and limitations associated with this model are well documented:

- **Social relations** might be tense between

the different customers as some might feel, in a subtle way, in debt to others.¹² Similarly, some people may not see why they should be subsidising others, especially in a context of generalised economic vulnerability (or delicate social relations).

- **Sufficient income.** The business has to ensure that the higher priced products/services continue to generate enough revenue to produce the lower priced product/service. Some companies have augmented the subsidisation model with other revenue streams such as investors, partners and donations.

3.4.b CROWDFUNDING (ALTERNATIVE TWO-SIDED MODEL)

Crowdfunding is when a business pools donations (normally through the internet) from multiple donors. There are four types of crowdfunding:

- **Donation-based crowdfunding** where individuals donate to a business or project without expecting anything in return.
- **Reward-based crowdfunding** where individuals donate to a business or project but expect tangible (but non-financial) reward or pre-purchase of a service or product for their contribution.
- **Equity-based crowdfunding** where funders expect/receive a stake in the company, royalties or promises of future equity.
- **Lending/debt-based crowdfunding** where the funders are paid back their donations over a period of time with interest.

≡ EXAMPLE

Zaatari Radio launched a campaign through the Kickstarter crowdfunding platform to raise funds to support its programme activities. The

radio station, based in Zaatari Village, Jordan, is run by refugees and serves the war-affected community. The radio station is used to broadcast and disseminate health campaigns, provide practical information such as services available to refugees, and promote musicians living in the area.

✓ SUITABILITY

In the commercial sector, this business model is suitable for innovators with high growth potential, particularly in the technology sector.¹³ Organisations providing social value may also benefit from crowdfunding but need a campaign that demonstrates the importance of the product and strikes a chord with the general public. So far none of the DEPP Lab innovators have attempted to use this model.

⚖️ BENEFITS AND CHALLENGES

Some of the benefits of this model are:

- It can be a quick and easy way to raise funding.
- The product is advertised to the people funding the business, giving them an opportunity to provide feedback that can be used to improve the product or service.
- This option is good for people who have ideas that are 'outside the box' and might not appeal to traditional investors.
- Crowdfunders do not usually require the same level of documentation and evidence as other donors.

Some of the challenges and limitations associated with this model are:

- **Untested platforms.** This model is popular in North America and Europe but less tested elsewhere. It might be difficult for innovators from other geographical areas to find

12. Evans, B., van der Voorden, C. and Peal, A. (2009) Public Funding for Sanitation – The Many Faces of Sanitation Subsidies. Water Supply & Sanitation Collaborative Council, Switzerland, Pg.18.
13. World Bank (2013) Crowdfunding's Potential for the Developing World.

fund-ers due to lack of awareness of, or confidence in using, crowdfunding platforms.

- **Platform fees.** Funds raised may be subject to fees payable to the crowdfunding platform.

- **Sustainability.** The innovation will require other revenue streams for sustainability. The money raised will not be sufficient to run a business and in the long-term crowdfunding can suffer from donor fatigue. ■

Canvas 11: Crowdfunding business model template.

<p>KEY RESOURCES</p> <ul style="list-style-type: none"> • Platform to source funds • Experienced campaign team 	<p>KEY ACTIVITIES</p> <ul style="list-style-type: none"> • Social media • Platform support • Product(s) development and management • Feedback and customer support 	<p>TYPE OF INTERVENTION</p> <p>Development of a product or service that caters to the needs of disaster-affected people.</p>	<p>SEGMENTS</p> <p>Disaster-affected people. You'll need to justify this choice of customer segment to the funder. Consider:</p> <ul style="list-style-type: none"> • target location • coverage of that location • how you reach the most vulnerable members of the community. 	<p>VALUE PROPOSITION</p> <p>Development of a product or service that caters to the needs of disaster-affected people.</p>
<p>PARTNERS AND KEY STAKEHOLDERS</p> <p>Who you need to work with in order to produce and deliver the solution.</p>		<p>CHANNELS</p> <p>The product or service is distributed directly to the affected community through your team.</p> <p>Crowdfunding platform to reach potential donors.</p>	<p>CUSTOMER</p> <p>Funders, who might include:</p> <ul style="list-style-type: none"> • general public • venture capitalist • angel investor • companies and corporations. 	<p>IMPACT MEASURES</p> <p>Not normally needed unless you are looking for recurring donations.</p> <p>CUSTOMER VALUE PROPOSITION</p> <p>To develop value for your donors, you will need:</p> <ul style="list-style-type: none"> • social media or video pitch that communicates your cause and goal • strong creative team with the ability to develop a compelling story/campaign that appeals to a wide audience of donors.
<p>COST STRUCTURE</p> <ul style="list-style-type: none"> • All costs associated with developing the products and services • Fee to the crowdfunding platform • All costs associated with the campaign, eg, videography, boosting the campaign on social media platforms • Consider bonuses for large donors 	<p>SURPLUS</p> <p>Investment of profits in product or service that will address the needs of disaster affected people.</p>	<p>REVENUE</p> <ul style="list-style-type: none"> • Fee from the higher priced product • Fee from the low-priced product • Funds from investors, partnerships and donations 		

Conclusions

Selecting and successfully implementing an appropriate business model is a challenge for innovators working in any environment. The added complexity and barriers faced by innovators who work in crisis areas, or in areas that are building resilience to crisis, make this already difficult task even more challenging.

It is important that this difficult work is not overlooked or oversimplified. Scaling sustainable innovations is a critical issue for humanitarian innovation. Far too few promising innovations have gone to scale. A failure to select, validate and implement appropriate revenue models is one of the key reasons for this.

This paper has provided an overview of the stages involved in developing a business model and the unique opportunities and challenges

of different models in a humanitarian context.

The authors are currently building on this work to provide a guide book and tools for innovators considering their business model options. The framework has also been designed to allow it to expand into a larger inventory, to allow

for additional examples of the business models being tested, or to allow for others to incorporate additional steps that address the concerns of innovators in a particular area.

In short, we see this as the beginning of a living resources that can grow and evolve in support of this challenging but essential mission to create a sustainable business model for humanitarian and resilience innovators. ■

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FAR TOO FEW PROMISING INNOVATIONS HAVE GONE TO SCALE. A FAILURE TO SELECT, VALIDATE AND IMPLEMENT APPROPRIATE REVENUE MODELS IS ONE OF THE KEY REASONS FOR THIS.



The creator of the unbaked brick innovation visits her first prototype, the home of Kohinoor. Kohinoor operates a tailor shop from her home, which has helped her spread the word about the cooler, fire resistant home, increasing demand locally for the product. **UDHVABANI INNOVATION LAB**

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The Disasters and Emergencies Preparedness Programme (DEPP) Innovation Labs is a two-year programme that aims to foster, and eventually scale up, innovations that address key problems faced by disaster-prone communities. It takes a community-centred approach, meaning that people and organisations affected by disasters are involved in the design, development and implementation of solutions, helping to ensure their relevance and appropriateness.

Are you interested in finding out more about the programme, labs and our innovators, including opportunities to support innovators to scale or deploy their ideas?

Visit startnetwork.org or email DEPPLabs@startnetwork.org.



The Mt. Marsabit Dairy is a women's cooperative with 30 members in Marsabit County, northern Kenya that sources dairy products from individual suppliers, supporting pastoralist women to earn a livelihood through a structured micro-milk collection system.
MAARIFA KONA/J. MWAURA

