UNLOCKING DIGITAL CASH AND VOUCHER ASSISTANCE

A GUIDE TO DIGITAL OPTIONS

FIRST EDITION: July 2022

OXFAM

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GLOSSARY

Automated teller machine (ATM): An electronic banking outlet that allows customers to complete basic transactions without the aid of a branch representative or teller.

Cash and voucher assistance (CVA): A type of emergency response and early recovery method that uses direct cash and voucher support to ensure participants can access essential goods and services while encouraging effective market recovery by involving local market actors in the process.

Cryptocurrency: A form of currency that exists digitally or virtually and uses cryptography to secure transactions. Cryptocurrencies do not have a central issuing or regulating authority, and instead use a decentralized system to record transactions and issue new units. They can be transacted using digital wallets in web and mobile devices and using digital cards.

Digital delivery mechanism: A means of delivering cash or voucher transfer from implementing agency to the recipient through a digital medium (e.g. smart card, mobile money transfer, ATM card).

Digital inclusion: The activities necessary to ensure that all individuals and communities, including the most disadvantaged, have access to and use of information and communication technologies (ICTs).

Digitalization: The process of transforming work processes by leveraging digital technologies to achieve greater efficiency.

Digital literacy: An individual's ability to find, evaluate and clearly communicate information through text and other media channels on various digital platforms. The digital literacy of the target population is an important aspect to consider for transfer mechanisms involving mobile wallets and digital cards.

Electronic vouchers (E-Vouchers): A card or code that is electronically redeemed at a participating vendor. E-Vouchers can represent monetary or commodity value and are stored and redeemed using a range of electronic devices (e.g. mobile phones, smart cards and POS devices).

Financial service provider (FSP): An entity that provides financial services, which may include transfer services.

Point of sale (POS) machine: Systems that are used to process electronic card payments.

Stablecoin: A class of cryptocurrencies that attempt to offer price stability and are backed by a reserve asset such as the US dollar.

Technology service providers: These encompass providers of digital platforms, software and hardware that facilitate the planning, delivery and monitoring of CVA and other humanitarian assistance. They can be differentiated from the financial service providers and payment service providers who specifically provide or support CVA transfer and delivery mechanisms.

1 INTRODUCTION

Digital technology has facilitated greater efficiency, transparency, adaptability and scalability of cash and voucher assistance (CVA) programs. Wherever feasible, Oxfam increasingly uses and promotes digital solutions and modalities to create better outcomes for CVA recipients through easier, faster and more secure and accountable means of delivery.

The process of digitalization of CVA projects includes two pathways: 1) use of digital tools for managing the CVA project cycle; and 2) use of digital mechanisms to deliver CVA to recipients. This toolkit has been developed to support Oxfam teams using or planning to use CVA by introducing different digital delivery mechanisms and providing a step-by-step guide to selecting a suitable mechanism aligned with a specific CVA programmatic context. It also presents a decision tree for selecting an appropriate delivery mechanism during hyperinflation and liquidity crisis.

1.1 What is this toolkit about?

Various parameters need to be investigated and considered when selecting an appropriate digital delivery mechanism. This toolkit helps CVA practitioners and decision makers to ask and answer important questions at various stages of the CVA project cycle, in order to systematically decide on the appropriate and relevant digital delivery mechanisms to use for their program and context.

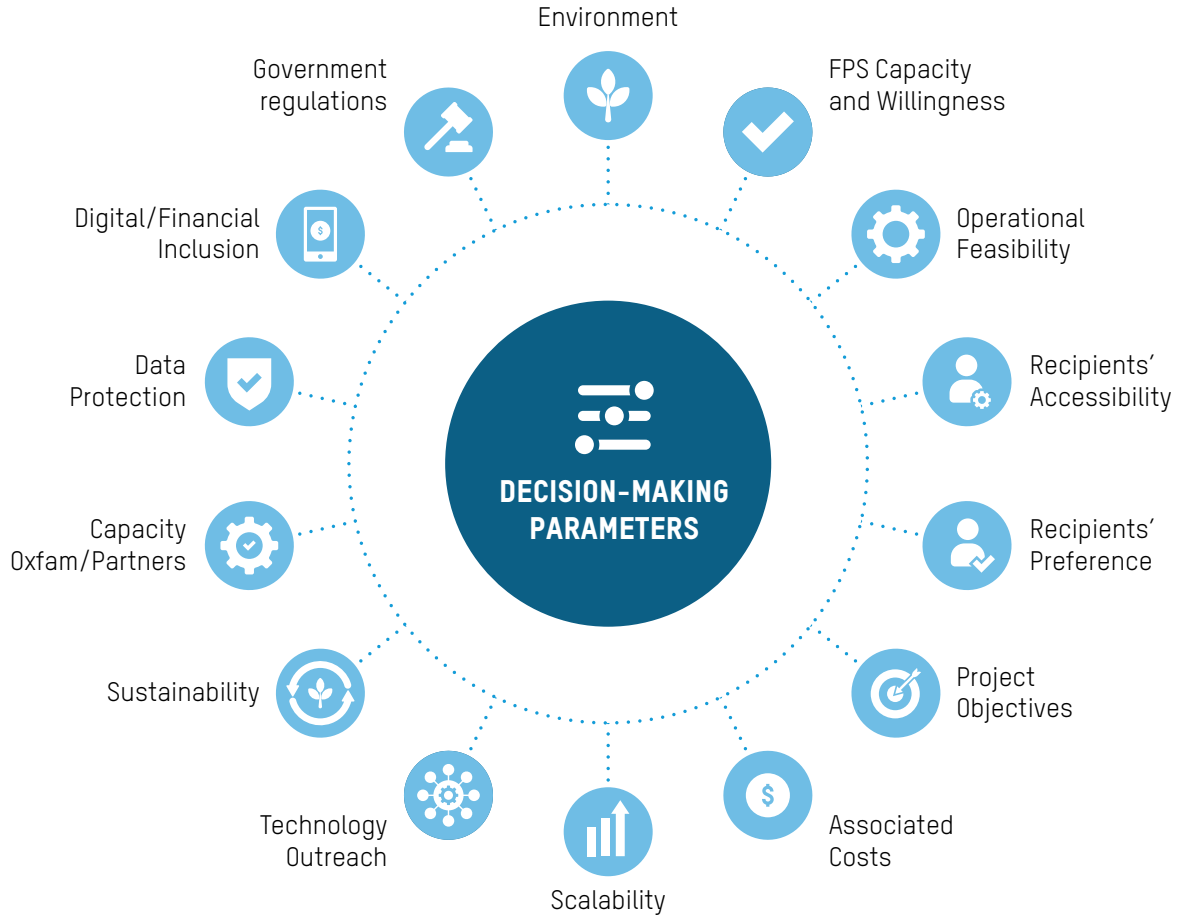


Figure 1: *Digital delivery mechanism decision-making parameters*

It should be noted that the toolkit assumes that a CVA project has followed sector-wide CVA standards and good practices such as assessments, project objective setting, and recipient targeting and selection. Therefore, these steps are not discussed in this toolkit. Rather, it focuses on making informed decisions when selecting appropriate digital CVA delivery mechanisms before completing a project design document.

All digital cash and voucher delivery mechanisms have their own merits and demerits. The appropriateness and efficiency of each may depend on project implementation contexts, something this toolkit provides guidance on.

When to use this toolkit

Once CVA is deemed feasible and appropriate in the response analysis phase of the CVA project cycle, a CVA program is designed detailing the program objectives, the geographic areas of the intervention, target recipients, transfer value, CVA modalities and delivery mechanism. Therefore, the toolkit must be used to select an appropriate digital delivery mechanism during the design phase of a CVA project.

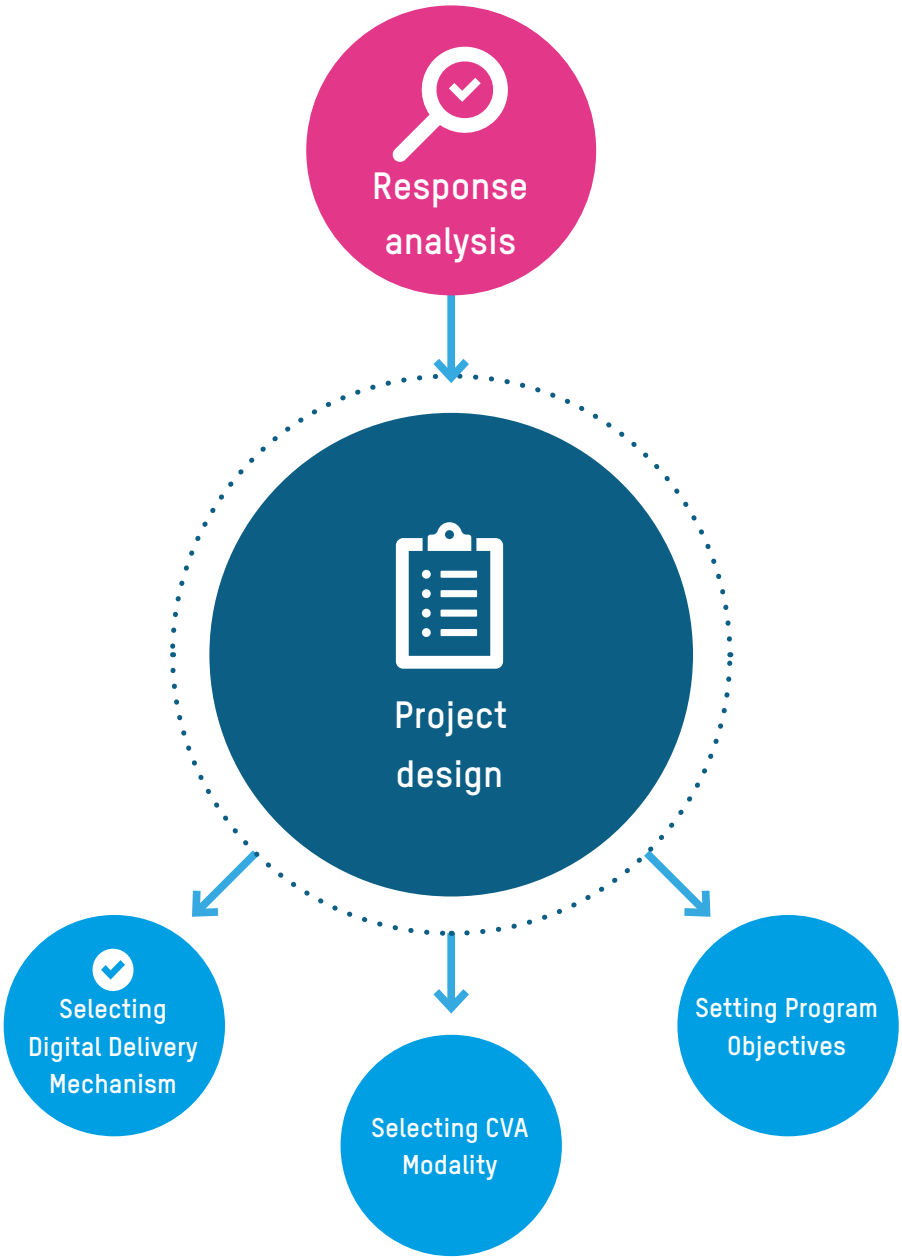


Figure 2: *When to use the toolkit*

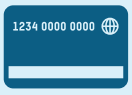
How to use this toolkit

This toolkit includes easy-to-understand guidance on selecting digital delivery mechanisms for both cash and voucher modalities. It provides an overview of decision-making steps as well as recommendations and a checklist of important questions that need to be considered to reach the right decision.

The toolkit discusses various parameters and delivery mechanisms, and it provides decision trees and scorecards. However, there may be exceptional cases that are not covered or that may contradict the logic presented. In such cases, a CVA decision maker is advised to use their best judgement to decide on the appropriate digital CVA delivery mechanism while providing justifications for the contradictions or newer approaches to decision making.

1.2 CVA delivery mechanisms and their digital spectrum

CVA delivery mechanisms are the means of delivering cash and vouchers to recipients. The following table describes a number of widely used and often cited CVA delivery mechanisms, the digital aspects related to them and associated service providers offering the services.

DELIVERY MECHANISM	ASSOCIATED SERVICE PROVIDERS	DESCRIPTION
CASH		
 **Cash-in-hand distributions**	Directly by Oxfam, partner or any humanitarian organization	Cash-in-hand distributions entail Oxfam/partners reaching the nearest point to recipient homes and communities and handing over the money directly in physical currency without contracting the services of the FSP. Transactions and record-keeping between Oxfam and FSPs can be conducted digitally. Although Oxfam, partners and service providers may use some form of digital record-keeping, the recipient-end transactions in these mechanisms are always manual.
 **Cash over the counter**	FSPs such as money transfer operators, remittance companies, banks, post offices and their payout agents	Direct cash payment to recipients in physical currency by using contracted FSPs as an over-the-counter service. Recipients visit the nearest payout agents to receive cash but do not require any form of recipient account or wallet in the FSP. Cash over the counter is digital at the Oxfam/partner end as they can transfer the money directly into the service provider bank account electronically. However, recipients receive hard cash.
 **Bank deposits**	Banks	Bank deposits are digitally transferred from the Oxfam/partner end, with the recipient having the option of receiving the cash manually from a bank branch or using the money digitally via internet banking, mobile banking or debit card facilities.
 **Prepaid cards**	FSPs such as banks, money transfer operators	Prepaid cards are electronic cards similar to automated teller machine (ATM) cards but recipients do not need to have bank accounts to receive them. Recipients can use prepaid cards to shop from vendors with point of sale (POS) machines and withdraw cash from ATMs. Prepaid cards are fully digital systems as all transactions at both ends are carried out digitally.

DELIVERY MECHANISM	ASSOCIATED SERVICE PROVIDERS	DESCRIPTION
VOUCHERS		
 **Paper vouchers**	Oxfam and partners	Paper vouchers are leaves of paper with authentication of value or recipient package entitlement.
 **E-Vouchers**	Technology service providers such as RedRose, Sempo and Laligurans	E-Vouchers are cards, codes, or digital tokens, that are electronically redeemed at a participating vendor. They can represent monetary or commodity value and are stored and redeemed using a range of electronic devices. E-Vouchers are fully digital systems as all the transactions are carried out digitally. Some widely used E-Vouchers are explained below. ➤ **SMS code-based vouchers** SMS codes are sent to recipients, who can take them to the vendors and redeem their entitlements. ➤ **QR/barcode-based vouchers** These are essentially cards bearing QR codes or barcodes. Vendors scan these vouchers via their mobile or scanning devices to complete the transactions. ➤ **NFC vouchers** Near field communications (NFC) is a mobile readable/ writeable card technology that can be used for value voucher modalities in offline settings. Digitally readable paper vouchers containing QR codes or barcodes can be used in offline settings, with each voucher signifying a single transaction.

Table 1: *Types of CVA delivery mechanisms*

The following diagram shows the spectrum of CVA delivery mechanisms. It illustrates the range of digital technology and processes used when transferring cash or vouchers from Oxfam/partners to service providers and finally to end recipients.

	RECIPIENT END	SERVICE PROVIDER END	OXFAM/PARTNER END
Cash in hand distributions	Manual	Manual/Digital	Manual/Digital
Paper vouchers	Manual	Manual/Digital	Manual/Digital
Payment via agent-network	Manual	Manual/Digital	Digital
Bank deposits	Manual/Digital	Manual/Digital	Digital
Prepaid cards	Digital	Digital	Digital
E-Vouchers	Digital	Digital	Digital
Mobile money	Digital	Digital	Digital

Figure 3: *Spectrum of CVA delivery mechanisms in terms of digital technology and processes used*

This toolkit focuses exclusively on **fully digital** CVA delivery mechanisms. Unlike manual delivery systems, fully digital mechanisms cover cash and voucher delivery mechanisms that do not require any paper-based entry for processing and recording transactions from Oxfam to service providers and recipients. Such mechanisms are signposted by the darker shade of blue in the above spectrum diagram, and include bank deposits, mobile money, prepaid cards and E-vouchers.

Sections 2 and 3 respectively focus on the selection processes for digital cash and E-Voucher delivery mechanisms, while chapter 4 provides guidance for choosing an appropriate CVA delivery mechanism during hyperinflation and liquidity crisis scenarios.

2 DECISION MAKING FOR DIGITAL CASH DELIVERY MECHANISMS

This section presents a three-step approach that can be followed to select a digital cash delivery mechanism.

It provides a step-by-step guide to the most suitable delivery mechanism among bank deposits, mobile money and prepaid cards, as the most widely used and referred to digital cash delivery mechanisms. Each of the individual steps is further elaborated on at pages 11 to 16.

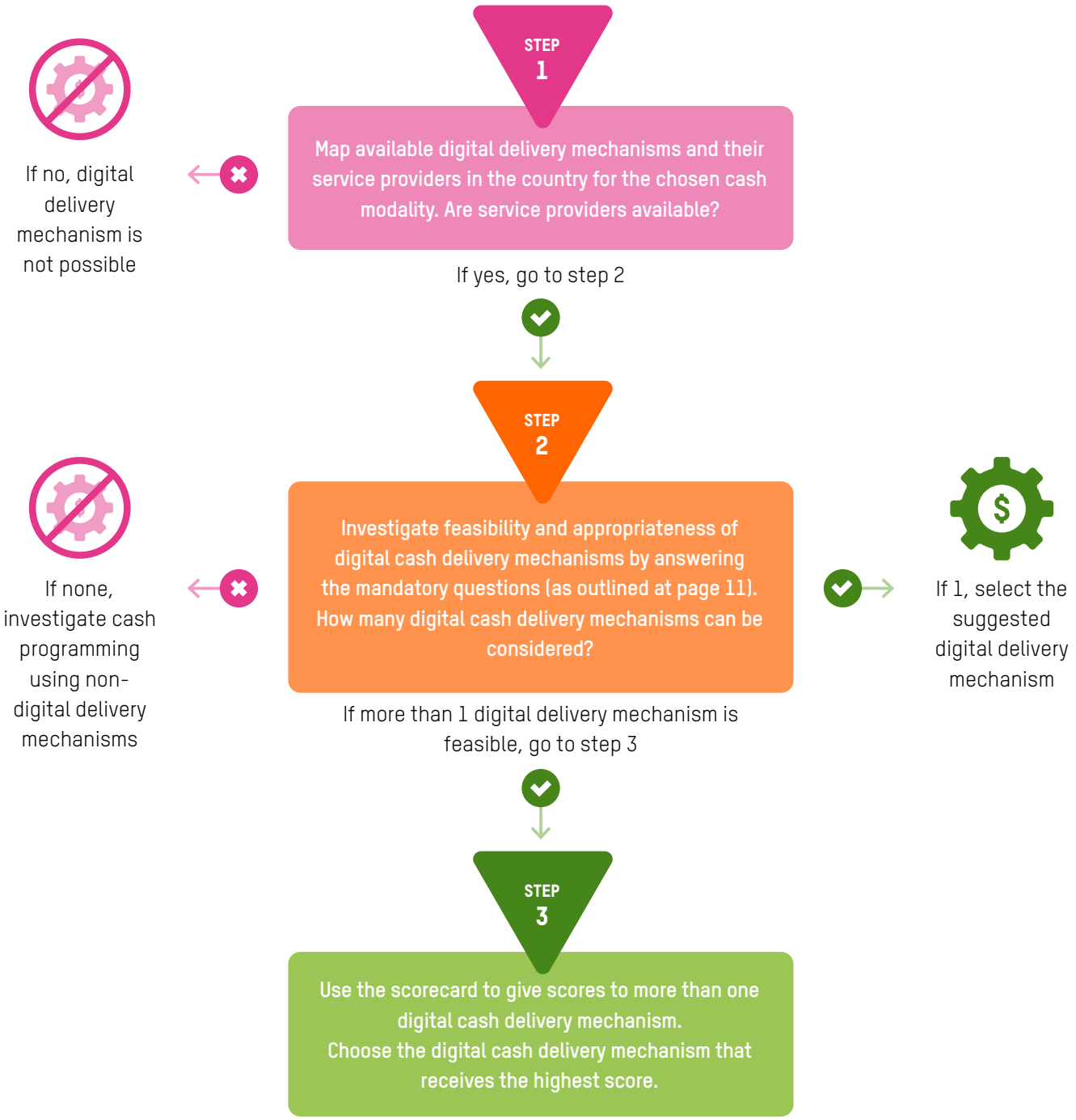


Figure 4: *Decision-making steps for digital cash delivery mechanism*

STEP 1

Mapping of Digital Delivery Mechanisms

The first step is to conduct a mapping exercise to assess the scope of available digital delivery mechanisms and their service providers in the country for the chosen CVA modality.

Review and consult stakeholders

To start the mapping exercise, conduct desk reviews and consult stakeholders such as cash coordination groups and other agencies implementing cash programs to broadly understand the existing service providers and the digital delivery mechanisms they provide.

Contact service providers to understand their offerings

Then contact the key service providers such as banks, mobile wallets and money transfer operators and conduct interviews to understand the services they offer.

Record the different services offered by different service providers

At the end of the FSP mapping exercise, a full list of service providers (including their offering and geographical coverage) will then be available for review. Once the mapping is complete, move to step 2.

Figure 5: *Digital delivery mechanism mapping exercise*

STEP 2

Feasibility and Appropriateness

Assuming that at least one digital delivery mechanism is offered by service providers in the desired location of intervention, move to step 2. Now investigate the mandatory requirements for each of the available and offered digital delivery services and analyze if one or more mechanisms can be considered in terms of feasibility and appropriateness.

The following decision tree can be used to investigate whether or not a digital delivery mechanism can be further considered.

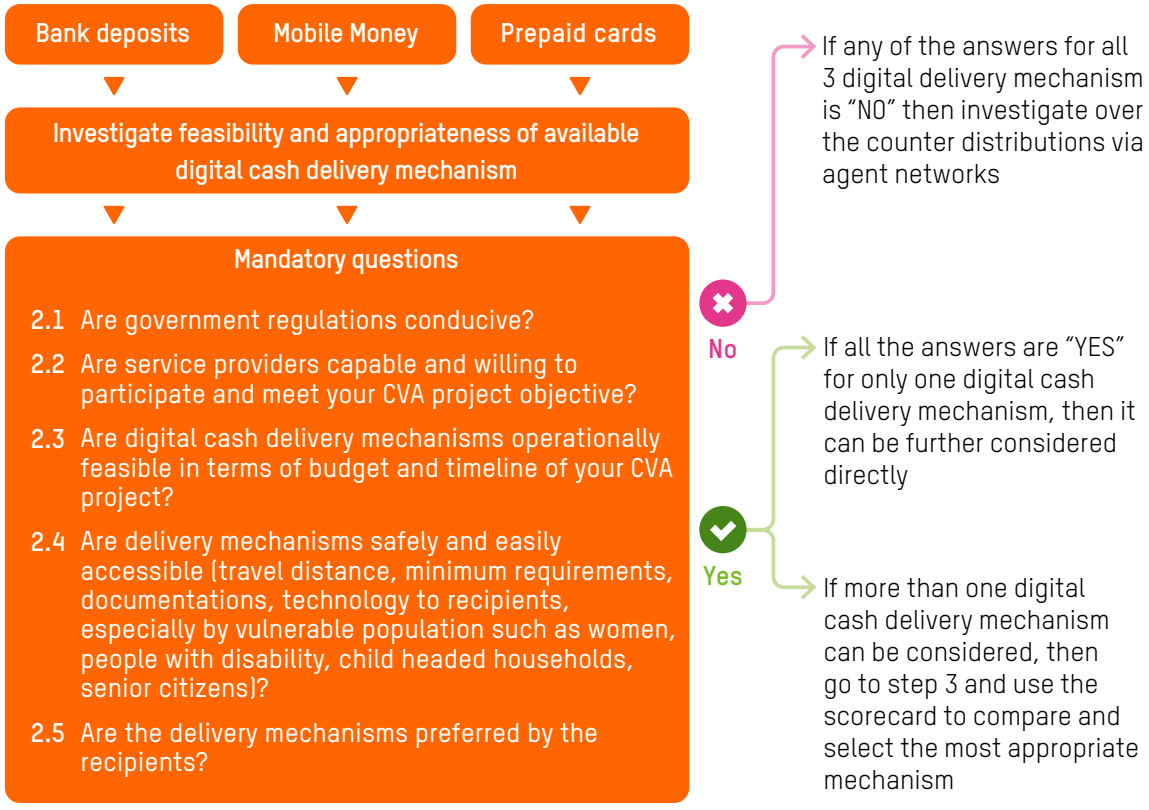


Figure 6: *Digital cash delivery mechanism mandatory questions*

Please use the following sets of questions to probe further on the mandatory questions shown in Figure 6.

2.1 Government regulations

- What are the government regulations around a humanitarian agency delivering cash assistance via digital delivery mechanisms? Are these regulations clearly laid out or are they ambiguous?
- Are government regulations conducive to opening bank accounts/mobile wallets for target recipients or distributing prepaid cards to them? Special attention should be given to vulnerable populations such as women, child-headed households, refugees and internally displaced populations.
- What are the documentation requirements to open a bank account/mobile wallet or issue a prepaid card? Do recipients have this documentation?

2.2 FSP capacity and willingness

- Do FSPs have branches in areas that are accessible to the recipients?
- Do FSPs offer services in areas accessible to the recipients via ATM machines, extension counters, agents and vendor POS machines?
- Are FSPs willing to work on reaching the communities by expanding their networks and facilitating necessary processes such as opening accounts and filling in know your customer (KYC) documents?

2.3 Recipient accessibility

- Can the most vulnerable populations such as women, persons with disabilities, child-headed households and older people safely and easily access these services for completing transactions?
- For how long (in minutes) will recipients have to travel to reach the nearest outreach points (bank branches, ATM machines, extension counters, branchless banking agents, vendor POS)?
- Do recipients need internet accessibility and technologies such as mobile devices to access the services? Do recipients have access to these?

2.4 Operational feasibility

- Can the project be completed on time by using the digital delivery mechanism?
- Does the project have enough budget to cover all the costs associated with digital delivery mechanisms (such as transfer fees and hardware)?

2.5 Recipient preference

- Is the digital delivery mechanism preferred by the recipients?
- Do the recipients have experience in using the digital delivery mechanism?

STEP 3

Further Analysis

If more than one digital cash delivery mechanism is deemed feasible, use the following scorecard to calculate which has the highest score and so determine the most appropriate delivery mechanism. This scorecard (under banks, mobile and prepaid cards) is a reference tool that can be flexibly adapted depending on the context and the country's response strategy. Country CVA teams can adjust the weight of scores depending on the contextual priorities laid down in their strategies.

1. PROJECT OBJECTIVES					
1.1 - What is the current phase of disaster management?					
	BANK		MOBILE MONEY		PREPAID CARDS
Preparedness	1 point		1 point		1 point
Anticipatory response	0 points (no bank account)	1 point (pre-existing bank account)	0 points (no mobile money account)	1 point (no mobile money account)	1 point
Early response	0 points (no bank account)	1 point (pre-existing bank account)	0 points (no mobile money account)	1 point (no mobile money account)	1 point
Recovery	1 point		1 point		1 point
1.2 - Is digital financial inclusion a priority for your project?					
	BANK		MOBILE MONEY		PREPAID CARDS
Yes	1 point		1 point		0 points
No	0 points		0 points		1 point

2. ASSOCIATED COSTS			
2.1 - Compare aggregation of associated costs (account opening charge, minimum balance, transfer fees, insurance, other costs, hardware, support).			
	BANK	MOBILE MONEY	PREPAID CARDS
Most expensive	0 points	0 points	0 points
Less expensive	1 point	1 point	1 point
Least expensive	2 points	2 points	2 points

2.2 - Compare transport cost of recipients.			
	BANK	MOBILE MONEY	PREPAID CARDS
Most expensive	0 points	0 points	0 points
Less expensive	1 point	1 point	1 point
Least expensive	2 points	2 points	2 points
2.3 - Compare human resources and infrastructure requirements (in terms of cost) of offered services.			
Most expensive	0 points	0 points	0 points
Less expensive	1 point	1 point	1 point
Least expensive	2 points	2 points	2 points

3. SCALABILITY			
3.1 - Compare capability to reach the highest number of recipients in the shortest possible time.			
	BANK	MOBILE MONEY	PREPAID CARDS
Most reach	2 points	2 points	2 points
Less reach	1 point	1 point	1 point
Least reach	0 points	0 points	0 points
3.2 - Can the partnership with the service provider be replicated to reach wider geographic areas?			
	BANK	MOBILE MONEY	PREPAID CARDS
Yes	1 point	1 point	1 point
No	0 points	0 points	0 points
3.3 - Compare the number of service use options (web-based, mobile-based, ATMs, POS machines, agent payout points, merchant networks, branches) for the recipients.			
	BANK	MOBILE MONEY	PREPAID CARDS
Highest	2 points	2 points	2 points
Low	1 point	1 point	1 point
Lowest	0 points	0 points	0 points

4. TECHNOLOGY OUTREACH			
4.1 - Are recipients experienced in using the offered digital services?			
	BANK	MOBILE MONEY	PREPAID CARDS
Yes	1 point	1 point	1 point
No	0 points	0 points	0 points
4.2 - Do recipients have access to the hardware resources needed to use the offered services?			
	BANK	MOBILE MONEY	PREPAID CARDS
Yes	1 point	1 point	1 point
No	0 points	0 points	0 points
4.3 - Compare the level of user-friendliness from a recipient perspective.			
	BANK	MOBILE MONEY	PREPAID CARDS
Most user friendly	2 points	2 points	2 points
Less user friendly	1 point	1 point	1 point
Least user friendly	0 points	0 points	0 points

5. SUSTAINABILITY			
5.1 - Are the recipients likely to use the offered service beyond the CVA intervention period?			
	BANK	MOBILE MONEY	PREPAID CARDS
Yes	1 point	1 point	1 point
No	0 points	0 points	0 points
5.2 - Where possible, compare recipient use of carbon-emitting vehicles to use the offered service.			
	BANK	MOBILE MONEY	PREPAID CARDS
Highest	0 points	0 points	0 points
Low	1 point	1 point	1 point
Lowest	2 points	2 points	2 points
5.3 - Compare the volume of paperwork to use the offered service.			
	BANK	MOBILE MONEY	PREPAID CARDS
Highest	0 points	0 points	0 points
Low	1 point	1 point	1 point
Lowest	2 points	2 points	2 points

5.4 - Compare the energy consumption and use of environmentally hazardous materials such as plastics by technologies used by the offered service.			
	BANK	MOBILE MONEY	PREPAID CARDS
Highest	0 points	0 points	0 points
Low	1 point	1 point	1 point
Lowest	2 points	2 points	2 points
5.5 - Can the offered service be linked with social protection schemes of the government to be used in future?			
	BANK	MOBILE MONEY	PREPAID CARDS
Yes	1 point	1 point	1 point
No	0 points	0 points	0 points

5. CAPACITY			
6.1 - Do Oxfam and partners have enough information and understanding to implement the CVA project using the offered services?			
	BANK	MOBILE MONEY	PREPAID CARDS
Yes	1 point	1 point	1 point
No	0 points	0 points	0 points
6.2 - Are the service providers able to maintain the data privacy and data protection required by Oxfam?			
	BANK	MOBILE MONEY	PREPAID CARDS
Yes	1 point	1 point	1 point
No	0 points	0 points	0 points
6.3 - Are Oxfam, partners and service providers able to identify, manage or transfer risks associated with the offered services?			
	BANK	MOBILE MONEY	PREPAID CARDS
Yes	1 point	1 point	1 point
No	0 points	0 points	0 points
6.4 - Are there existing framework agreements with service providers to carry out humanitarian cash transfers via bank deposits?			
	BANK	MOBILE MONEY	PREPAID CARDS
Yes	1 point	1 point	1 point
No	0 points	0 points	0 points

Table 2: *Scorecard model for selecting appropriate digital delivery mechanism*

Go to http://cvascorecard.ariatech.com.np/ to access the aforementioned CVA scorecard's calculator.

3 DECISION MAKING FOR E-VOUCHER DELIVERY MECHANISM

Major parameters for E-Voucher decision making include single versus multiple transactions and availability of internet and mobile network connectivity. Widely used and referred to E-Voucher delivery mechanisms include SMS codes, QR code/barcode cards, NFC cards and single-use digital paper vouchers. Oxfam has also piloted blockchain-powered tokens as E-Vouchers that can be delivered via SMS, QR code/barcode and NFC cards. Blockchain technology maintains the records of transactions in decentralized distributed ledgers, which gives it more security against data tampering. The following decision tree provides a guide to the parameters to consider when selecting the most appropriate E-Voucher delivery mechanism.

Figure 7: *Decision tree for E-Voucher delivery mechanisms*

4 CVA DURING HYPERINFLATION AND LIQUIDITY CRISIS SCENARIOS

Hyperinflation and liquidity crisis scenarios bring tremendous challenges to conducting CVA projects. Hyperinflation, meaning the rapid devaluation of local currency, can leave the recipients with inadequate money to fulfil the needs the project aims to meet. Liquidity crises, on the other hand, hamper the ability of transfer service providers to provide recipients with cash on demand. In the case of an economy going through a period of hyperinflation, a CVA program can explore the possibilities of foreign currencies or stablecoin. Stablecoin is a class of cryptocurrencies that attempts to offer price stability and is backed by a reserve asset such as the US dollar.

The following decision-making flowchart guides CVA practitioners in choosing the most appropriate modality and transfer mechanism to best meet the project objectives and recipient needs during hyperinflation and liquidity crises.

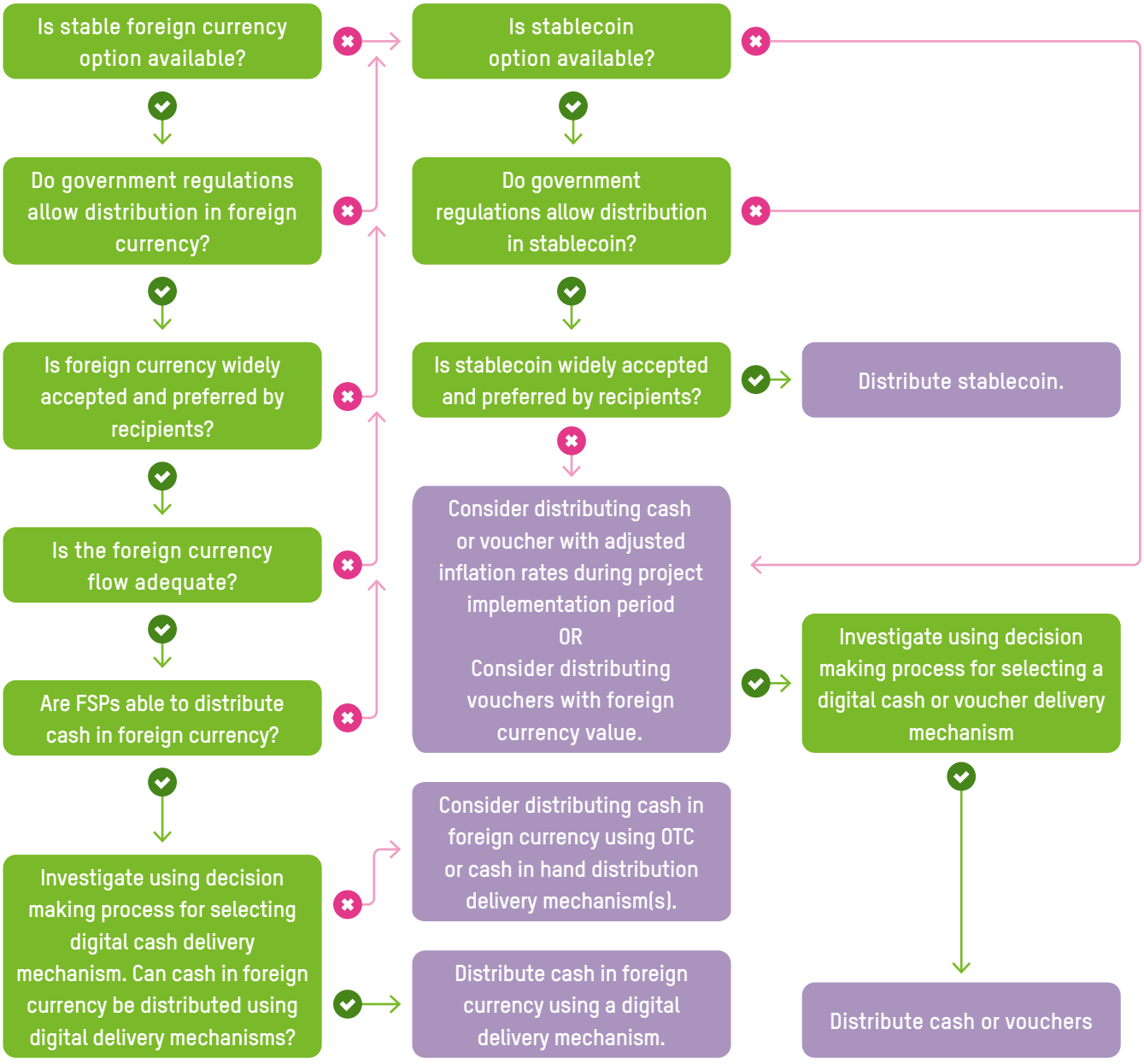


Figure 8: *CVA decision tree during a hyperinflation and liquidity crisis scenario*

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