

26 August 2020

# *DIGITALISATION OF HUMANITARIAN CASH AID*

An outlook on the future of digital technologies in humanitarian cash transfers programmes from the perspective of the staff of Dutch NGOs

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## Abstract

More and more humanitarian interventions provide cash relief, and do so by using digital technologies. But why is this happening and who really benefits from this: recipients or NGOs? This thesis has explored how aid workers see the future of digital cash transfers in humanitarian programming, by asking questions related to the different types of cash projects and digital technologies, the drivers for change and the risks and benefits of using digital cash. It has used a qualitative research set-up in which semi-structured interviews were used to gather information from aid workers from the organisations affiliated with the Dutch Relief Alliance. This thesis found that the use of digital cash transfers can contribute to optimising the aid distribution component of a humanitarian intervention and has the potential to benefit both NGOs and recipients. By handing out cash instead of in-kind goods, NGOs are empowering the recipients and providing them with more dignity. Cash also has the ability to stimulate the local economy instead of jeopardizing it. Technology in addition brings safety to the table. It can also help in reducing misappropriation and fraud, as well as provide a cheaper and faster response. Though it is indeed true that donors have a significant influence on NGOs and their programming, organisations themselves always have the final say on whether or not they want to implement a programme with a digital cash component. The most important conclusion of this thesis is that neither technology, nor cash, are the whole story. They are only part of the story. A programme that consists solely of transferring money from the organisation to the recipient and then leave it at that, will never be a good programme. Aid in the form of digitally transferred money is not enough, it is not a programme in itself, it is merely a modality.

## Acknowledgements

I would like to express my sincerest gratitude to my supervisor Lotje de Vries. Her ability to guide me through this process has made it possible for me to keep going and power through. Thanks to her support, I was able to finish this project. Lotje, I am forever grateful.

I also want to thank the 23 people I was able to interview for this thesis. They selflessly made time in their busy work schedules to answer my questions, and their experiences and expertise guided this project to the next level.

Lastly, I would like to thank friends and study mates with whom I spend many hours working on our theses together in the WUR library or at home.

## List of Acronyms

<b>AI</b>	Artificial Intelligence
<b>ATM</b>	Automated Teller Machine
<b>CBA</b>	Cash Based Assistance
<b>CFW</b>	Cash For Work
<b>CTP</b>	Cash Transfer Programme
<b>CVA</b>	Cash and Voucher Assisatance
<b>DCT</b>	Digital Cast Transfer
<b>DIF</b>	DRA Innovation Fund
<b>DRA</b>	Dutch Relief Alliance
<b>EU</b>	European Union
<b>GDPR</b>	General Data Protection Regulation
<b>HIV/AIDS</b>	Human Immunodeficiency Viruses and Acquired Immune Deficiency Syndrome
<b>IDP</b>	Internally Displaced Person
<b>(I)NGO</b>	(International) Non-Governmental Organisation
<b>IO</b>	International Organisation
<b>JR</b>	Joint Response
<b>ODA</b>	Official Development Assistance
<b>SDGs</b>	Sustainable Development Goals
<b>SHO</b>	Samenwerkende HulpOrganisaties
<b>UN</b>	United Nations
<b>UNHCR</b>	United Nations High Commissioner for Refugees
<b>US</b>	United States
<b>WFP</b>	World Food Programme

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## 1. Introduction

“Just give money” was on the front page of a national Dutch newspaper in August 2019. The newspaper dedicated two pages to outline how providing mobile cash assistance without strings is the new credo in the world of international aid. The recipients themselves know best what they need, it is cheaper and less complicated than organising the distribution of goods. Chances of fraud and waste of in-kind goods are reduced and the money flows to the local economy. On top of that: transferring money is a piece of cake thanks to mobile phones and is possible in all corners of the world (Vos, 2019). The next day that same newspaper printed a column of which the main message was: a blind trust in new technologies to solve societal issues is naïve. It focused specifically on artificial intelligence (AI) and warned to be careful and not treat it as a silver bullet. Self-learning algorithms make mistakes, can be manipulated and don’t do well with exceptions. More importantly, algorithms make decisions based on the entered data and the assumptions of the developers: these are not objective (Cath-Speth & Dobbe, 2019). These two trends in the humanitarian world, from in-kind distributions to cash and the incorporation of digital technologies, is the result of a donor push due to the cost-efficiency of the two.

The humanitarian sector is dealing with a structural money shortage. The amount of reported natural disasters, for instance, has been decreasing since 2000, with 526 disasters in 2000 to 291 in 2017, and the death toll of those disaster declining from 3.71 million deaths in peak year 1931 to 9,066 in 2017 (Ritchie & Roser, 2019). Even though the frequency of natural disasters is decreasing, the costs are not. The global damage costs have grown from 30 million in 1900 to 144.11 billion in 2017, mostly because there are more and more people affected: 92.86 million people were affected in 2017 by natural disasters alone (Global number affected by natural disasters, n.d.). This is due to urbanization and rapid population growth, but also climate change that leads to environmental degradation. As a result, especially in developing countries, people are more and more vulnerable to natural disasters, and the impact of a disaster is also intensifying (Abramovitz, 2001; World Economic Forum, 2019). This is merely one example of how the demand for humanitarian aid continues to increase, while the gap between the amount of money needed and the funds available is also growing (Stoianova, 2017; Verme & Gigliarano, 2019).

Non-Governmental Organisations (NGOs) are receiving more and more funds from institutional donors, and this in turn increases the influence that donors have on NGOs. Since NGOs rely so much on external funding, their future resources depend on clear evidence of their successes and failures. This contract between NGOs and donors influence NGOs' incentives and decisions (Fruttero & Gauri, 2005). Working under growing budget constraints leads donors to demand more cost-efficiency from humanitarian organisations. Looking at the annual reports of some Dutch NGOs, it is no surprise that agencies tend to adapt policies to what donors want. Last year Oxfam Novib received around 67% of their funds from institutional donors (Schuiling, 2019). Cordaid received 76.2% from institutional donors (Cordaid, 2019), World Vision around 66% (Stichting World Vision Nederland, 2019) and CARE received 72.5% of their budget from institutional donors (CARE Nederland, Bijl, Gigengack, & Uitterlinden, 2018).

According to NGOs, they exist to help those most in need, i.e. the most vulnerable (World Vision, 2020; Cordaid, 2020; CARE Nederland, 2020). One of the modalities organisations use as a means of aid provision is cash relief. Cash-based aid —rather than in-kind aid— is that cash gives recipients a sense of empowerment that in-kind assistance cannot provide. Handing out cash allows people to buy the goods and services that they need, while it simultaneously allows recipients to keep their dignity (Bailey & Harvey, 2015). By opting to hand out cash, the organisations forgo the costs that come with in-kind aid, such as leasing storage space and transport costs. Other than empowerment and cost-efficiency, cash also has the potential to reach other aims, such as improved access to food and to help households meet their basic needs such as shelter (*ibid.*). There are some unintended positive side-effects as well, for instance some of the received money can be saved by the recipients for the future (Hidrobo, Hoddinott, Margolies, Moreira, & Peterman, 2012), and recipients of cash eat both more and more diverse food (Bailey & Hedlund, 2012).

The provision of cash is not the only innovation that NGOs embrace, so is the use of digital technologies. The fast improvements in technology offer favourable conditions for cash assistance. It is believed that donors are looking for organisations to provide cash digitally not only because it offers cost-efficiency, but also because it promises to be more transparent (World Bank, 2016). Furthermore, by using technology in humanitarian responses,



organisations could possibly detect needs earlier, the scale of projects can increase, as well as the speed of assistance. On top of that, using technology can improve accountability, while simultaneously it can reduce corruption (Smith, MacAuslan, Butters, & Trommé, 2011). Additionally, both the low-tech manners of handing out in-kind goods as well as cash have the issue of double dipping, where a person accidentally receives aid twice, so the international community turned to digital technologies for solutions. By changing the registration process from manual to digital, recipients' biometric data (such as fingerprints and iris scans) can be used to ensure recipients only receive aid once.

### 1.1 Research Aim, Relevance and Questions

Nowadays it is an increasing phenomenon to implement a humanitarian programme that consists of transferring cash to mobile phones, and to register recipients by using biometric data. Though the majority of aid is still that of giving items, more and more aid comes in the form of cash, due to the rapid spread of electronic payment technologies. But this raises the questions: is Cash Based Assistance (CBA) based on the outcomes of needs assessments and analyses, or also on other factors, such as a push from donors? Who really benefits from the move towards cash and technology, the recipients, or the organisations and donors? Especially technology seems to provide more benefits for the organisations (such as cost-efficiency, prevention of double dipping) and only some for the affected population (e.g. scale increase leads to more recipients). The downsides of technology however, seems to affect only the recipients: their data is being stored, which raises concerns about their privacy and power relations between organisations and recipients. Who stores and has access to this data, how long is it stored? Are recipients informed of the risks of data storage, and what if recipients do not want to give their data? Are recipients then excluded from the projects?

The purpose of this study is to investigate if CBA and digital technologies are really an improvement for the recipients or not, and how it contributes to Non-Governmental Organisations' goals to aid those most in need. I will do so by looking at NGOs that are affiliated with the Dutch Relief Alliance (DRA) from the perspective of their staff. By bringing together institutional donor influences and digital cash transfers, this research contributes to the growing literature available on the digitalization of humanitarian aid. It will also look into what aid workers believe needs to be taken into account when organisations are considering

to implement a programme with a digital cash component. This has led to the following research questions:

How do aid workers see the future of digital cash transfers in humanitarian programming?

1. What type of cash projects are implemented and which digital technologies are used in the implementation?
2. Who are the drivers for change from low-tech in-kind aid distributions to high-tech cash transfers?
3. How do aid workers perceive the risks and benefits of using digital cash?

## 1.2 Dutch Relief Alliance

Over the years, several initiatives for collaboration were created so that organisations together could achieve greater impact. Examples are the ACT Alliance, in which several religious organisations are united, and *Samenwerkende HulpOrganisaties* (SHO) which responds to extraordinary disasters. For this thesis, I will focus on the aid workers that work for NGOs that are part of the Dutch Relief Alliance (DRA). I chose to focus on the DRA because this initiative is active all year round and does not exclude organisations based on certain characteristics such as religion. The DRA is a coalition of 15 Dutch NGOs that receives its funds from the Ministry of Foreign Affairs and was established because of the increasing budget constrain on the humanitarian system. By working together, the DRA hopes to better respond to international crises in a timely and effective manner than a single organisation could achieve (Dutch Relief Alliance, 2017). When a humanitarian crisis occurs, the DRA designs a Joint Response (JR), in which several organisations that are best placed to respond to the crises work together to implement the programme. The programme follows the Joint Response Guidelines, a document that is drafted by the JR lead organisation and two other members. In this peer reviewed documents, the organisations can find the participating partners, the target population, needs and budgets (Dutch Relief Alliance, 2020).

### 1.3 Thesis outline

The rest of this thesis is organised as follows: first the conceptual framework is established in which I will offer an overview of the literature on transfers and digital technologies, and the benefits and risks of both. In this chapter I will also discuss the influence that donors have on NGOs. Then, the methodology used to conduct this research is described, along with the ethics and limitations. Subsequently, I analyse the gathered data in three chapters. The first of these delves into different cash modalities and technologies and concludes which of these has the best prospects. Chapter 5 analyses the data on the decision-making forces behind the trend to more and more implement programmes with a digital cash component, and finally the aid workers' views on the risks and benefits of digital cash programmes will be compared with what academics have to say about this in chapter 6. This thesis ends with a discussion and a conclusion that will answer the research questions as well as provide suggestions for future research on this topic.

## 2. Conceptual Framework

As I stated in the research relevance, I am looking into digital cash based assistance to try to understand who really benefits from it. Why do NGOs even exist? According to Kajimbwa (2006) it is because of the retreat of centralized governments, and because of a keen interest of donors. NGOs have to negotiate their access to their targeted populations each and every time, because “there are no legitimate perimeters to humanitarian action, valid at all times and in all situations” (Allié, 2011, p. 2). NGOs are even willing to sacrifice their core principle to continue to exist, as for example MSF has over the years frequently sacrificed its freedom of speech in order to operate in the desired areas (Allié, 2011). So what about the use of cash and technologies in NGOs programming? Does that really contribute to their goal of reaching those most in need/most vulnerable? Or does it merely benefit the organisations themselves, and ensure their continued existence? And what role are donors playing in this story? In this chapter I will provide the conceptual framework for this thesis. I will discuss the benefits and downsides of cash transfers and digital technologies first, and finish with a discussion on the influence that donors have on humanitarian programmes. In this chapter I will discuss the scientific literature on this phenomenon, to provide the base for the analysis of my data later on.

### 2.1 Cash Transfers

Cash based response as means to provide aid has rapidly gained in popularity since the 2004 Indian Ocean Tsunami when several agencies piloted cash programmes in addition to in-kind aid provisions (Bailey & Harvey, 2015). The idea is that by providing cash assistance rather than in-kind donations, households that receive aid will be able to make their own decisions on what to spend the money and are thus better able to get what they need, rendering households more independent than they would be if they would receive in-kind assistance (Ibid.; Piotrowicz, 2018). This form of aid is called Cash and Voucher Assistance (CVA) and the empowerment and dignity aspect that cash gives is believed its greatest strength. CVA provides greater dignity and choice for the recipients, and enlists the local markets and supply chains to serve the recipients, thus simultaneously supporting economic recovery or even growth in the impacted area and the surrounding areas (Kopczak & Matthews, 2016).

Moreover, cash offers flexibility and is often less time-consuming to collect than in-kind aid (Kebede, 2006).

There are concerns that cash will be misused and not spent on its intended purpose. Instead of using the cash to buy items that a household can need, such as food or blankets, organisations worry that the cash will be used to buy unnecessary items such as alcohol (Kebede, 2006). However, evaluations of cash projects show that cash projects are effective in the sense that the offered aid is indeed used for its intended purpose. Recipients of cash mostly use that money for essentials such as food and water (Roelen, Longhurst, & Sabates-Wheeler, 2018). It is also worth mentioning that the concern to use aid to buy unnecessary products should not be limited to cash aid. In-kind goods can be sold, and the yielded money can then just as easily be spent on other items. A comparison between cash aid and in-kind aid found that cash is indeed more often used for its intended purpose than in-kind distributions (*Ibid.*).

Already in the 1980s was it questioned whether cash assistance is more beneficial than in-kind donations because it would not disrupt local markets and would save the expense of having to transport food (Coate, 1989). The latter point is endorsed by a programme that was implemented in Ethiopia in the beginning of this century: the costs of importing and distributing foods costs about 39-46% more than issuing cash, though when food is procured locally it only costs six to seven percent more than distributin cash (Kebede, 2006).

Despite the advantages that cash brings, academics also argue that cash transfers pose risks such as a disruption of household dynamics, theft, lack of capacity or knowledge of the implementing organisation, corruption, insecurity and fraud (Roelen, Longhurst, & Sabates-Wheeler, 2018; Piotrowicz, 2018). Embezzlement of cash by the staff of the implementing organisation and inflation are also added to that list. Especially inflation can seriously hamper the cost-efficiency results, as authorities need to then step in to halter and reduce the soaring market prices. These efforts also cost money, and could eventually lead to cash projects being more expensive than implementing a locally procured food programme (Kebede, 2006).

Various conditions need to be taken into account when considering to implement a cash project, such as the season, which determines the price and supply of food most notably depending on the harvest, or weather conditions that can influence transport of products to the markets, and the circumstances following the shock (Roelen, Longhurst, & Sabates-Wheeler, 2018). Moreover, there has to be a functioning market, and adequate infrastructure to provide access to these markets (Piotrowicz, 2018). With the move towards cash, 'cash first' is becoming the new standard. Aside from a functioning market, access to infrastructure and security, recipients also need to favour cash. Thus, assessments beforehand need to point out whether cash is the appropriate modality or not. Depending then on whether the context is suitable, cash does not pose different or more risks than in-kind aid, and as such is a positive step forward due to its most important benefits of empowerment and cost-efficiency.

While many positive and some negative things can be said about handing out cash in humanitarian programmes, it is important to keep in mind that it is merely a modality, a means to an end, and not the end itself: for instance, a study done in Burkina Faso showed that handing out cash did not reduce the occurrence of malnutrition and morbidity and the incidence of stunting in children under three years old. An important reason the authors provided for this, was that cash transfers alone were not a sufficient enough intervention, and that a solution could be to complement the cash transfers with behaviour change communication: in addition to the cash transfers, the authors argue that the project could also offer behavioural change training, monitoring and evaluation and a sustainability component (Houngbe, et al., 2017). Another study showed that without the constant involvement of the recipients in the process and implementation phase, cash transfers are not going to increase resilience. World Vision conducted an intervention in Zimbabwe after a drought in which the people affected were provided with cash transfers. The result of the study was that local resilience to drought was not improved after the intervention, partly because the influx of cash was too low for households to invest in non-food items that support the resilience process. More importantly, the organisation did not include the people affected enough in the process. This had as a result that the programme design did not take local settings enough into consideration, and thus was unable to provide adaptable interventions that enhances the local capacities to be able to cope with future droughts (Ndlovu & Ndlovu, 2019).

## 2.2 Digital Technologies

In this day and age, there are even more ways to make interventions more cost-efficient. When humanitarian agencies started with the provision of cash instead of handing out (non-) food items as means of relief in the early 2000s, the way they went about this was almost identical to that of in-kind aid. It was mostly managed and designed as if it was an in-kind distribution, so the organisation would subcontract a third-party provider, such as a money vendor, who would then bring the money to the site and distribute it to the recipients. It is in theory the same model as in-kind distributions, only now the agencies distributed money as opposed to blankets or food. This model however, is moving more and more towards higher technological platforms. Together with the increase in Cash Transfer Programmes, mobile penetration is also on the rise, paving the way for technology and cash combined to make a powerful impact in the humanitarian world. The world's largest humanitarian organisation, the Red Cross, has acknowledged the need to fully embrace a technology oriented approach to humanitarian action, in order to improve all aspects of aid delivery (IFRC, 2013). In the addition, the first of the four pillars of the Dutch Relief Alliance is innovation (Dutch Relief Alliance, 2020). One of the reasons this is happening is because it is cheaper, thus satisfying donor requirements, but there are more benefits than cost-efficiency to a digital approach of transferring cash to recipients.

Technology can ensure faster response, particularly during sudden onset disasters (Mesmar, et al., 2016). Additionally, the use of technology can increase efficiency and thus reduce costs. In comparison, handing out cash by hand further runs into infrastructural problems, an obstacle that electronic payments can overcome. But while some studies show that the use of technology can increase the speed with which aid can be delivered, another study has found that the use of big data actually hampers a fast response time, at least during epidemics (Erikson, 2018).

When using digital technologies, the safety of recipients and staff is increased, as neither have to carry large bags of physical cash down the streets. When it comes to physical cash and in-kind aid, both modalities are prone to theft and diversion. This risk is reduced when electronic payments such as mobile money, ATM cards or e-vouchers are used, because this money can be better traced. Therefore, attempts to theft, fraud and diversion are more likely to be

detected (Gordon, 2015). Agencies that have experience with using electronic payment systems found that there was enhanced security for both recipients and their staff, more control of payments, and it also increased speed and efficiency (Smith, MacAuslan, Butters, & Trommé, 2011).

More and more articles and reports are being published and have been published that claim that incorporating technology in aid delivery will change things for the better (see e.g. Mancini & O'Reilly, 2013; Harvard Humanitarian Initiative, 2011). On the other hand, there are also negative aspects that a focus on technology brings. One of those risks that can occur is related to the context in which humanitarian organisations operate. Humanitarian practices are situated in complex political dynamics, and the use of technology may only increase this complexity. For instance, biometric technology is used to register recipients to ensure that each person only receives aid once and reduces the risk that aid can be abused, but storing recipients' biometric data leads to questions about data sharing and privacy, and thus the safety of the recipients (Jacobsen, *The Politics of Humanitarian Technology: Good Intentions, Unintended Consequences and Insecurity*, 2015). This could jeopardize NGOs' principle to do no harm. Organisations now not only need to provide protection in order to ensure recipients have access to aid, but also need to provide protection to ensure third parties are denied access to this sensitive data. By using advanced technologies such as biometric data organisations create new domains for information sharing, which can create risks for the recipients (Jacobsen & Fast, 2019). It seems that using this type of technology is able to eliminate risks that the organisations were dealing with, such as double dipping, but as a result recipients are more at risk than before, because they have no control over who possesses their data, but if they want to receive aid they have no other choice than to go along with these demands.

Another problem is that most technologies facilitate data collection and analysis, and use algorithms to do so. But algorithms are far from objective: algorithms can be used to connect the dots between already existing relevant data currently residing in different databases. By connecting the dots, algorithms anticipate a course of events, and thus bring the future into the present. But: correlation does not mean that there is a direct causal connection (Amoore, 2009). For instance, the use of algorithms in detecting fraud can mean that a detection system



will focus on households in 'problematic' residency areas. This type of discrimination can be strengthened by the detection system, because it will increasingly classify households in such areas as higher risk for fraud because it has detected fraud in those areas before. By focusing on households in such areas, it will also become less likely that fraud will be detected amongst wealthier households (Cath-Speth & Dobbe, 2019). Without reflection on their impact and a regulating framework, the use of algorithms and technology in general may compromise the most important humanitarian principle to do no harm (Sandvik, Jumbert, Karlsrud, & Kaufmann, 2014).

During and after crises, pre-existing gender inequality and discrimination can be further increased. Women and girls face increased insecurity, limited mobility, sexual exploitation and gender-based violence. Women's livelihoods are disproportionately affected and girls are more likely than boys to lose out on education. This affects the ability of households and communities to recover from crises (Lafrenière, Sweetman, & Thylin, 2019). The use of technology in aid delivery can even further exacerbate gender inequality and discrimination. Women more often than men lack identification documents due to economic and social barriers. This increases women's lack of access to financial systems, and thus hampers women's ability to receive humanitarian cash aid when said cash is transferred through wire transfers to bank accounts (Thylin & Duarte, 2019).

Unlike the in-kind versus cash debate, digital technology is a much more contested subject, and the humanitarian sector as well as academics are far from reaching consensus. The use of technology has promising prospects, but too many problems are unsolved at this time to be convinced that digital technologies are the solution for the money struggles in the humanitarian field.

### 2.3 Donor Influence

As was stated in the introduction, the humanitarian field increasingly has to deal with a larger amount of people in need, whereas the funds available are not increasing equally as much, thus creating a gap and having less money per person available every year. It is not only the agencies that see the need to increase the gap, donors are gradually putting more pressure on organisations to provide cheaper and more effective aid.

In the field of international aid provision, both developmental as well as humanitarian, there is the shared belief that NGOs are better equipped to reach those most in need and to provide more effective aid. This confidence exists because unlike state agencies, NGOs are not expected to take political and economic interests into account, having as a result that NGOs are closer to the most vulnerable people than official aid agencies (Koch, Dreher, Nunnenkamp, & Thiele, 2009; Davis, 2019). This is why, in the past three decades, NGOs have become major influential stakeholders as they receive more ODA funds than their state counterparts (Davis, 2019). However, donors were used to having a say about how their money had to be spend: in the older forms of bilateral aid, donors had maximum control over aid allocation in terms of location, themes as well as projects (Kiratli, 2019). Donors do not necessarily have altruistic intentions, in fact, more often than not, donations are politically, economically and/or commercially motivated. Though there are some people that might gift something to someone else for purely selfless reasons, most transactions are not unilateral. The decision to transfer funds from one society to another is made on the basis of personal interests rather than altruism (Dudley & Montmarguette, 1976). Subsequently, to maintain their independence, most NGOs gather behind the fundamental humanitarian principles once established by the Red Cross: Subsequently, most NGOs are signatory to the highest humanitarian codes and standards as once established by the International Red Cross and Red Crescent Movement in their Code of Conduct. These fundamental principles are humanity, neutrality, impartiality and independence. The majority of the principles are reinforced in United Nations General Assembly resolution 46/182, which states: “humanitarian assistance must be provided in accordance with the principles of humanity, neutrality and impartiality.” (United Nations, 1991), ensuring legal obligation. Interestingly enough, the principle of independence was not adopted in this resolution.

The principle of independence means that an organisation is supposed to act independently from outside influences, such as donors and governments, free to choose to allocate aid to locations and people that need it the most. However, several studies have found that NGOs are indeed influenced by donors and that they act not as autonomously as is widely believed (Davis, 2019; Crack, 2019; Ancker & Rechel, 2015; Koch *et al.*, 2009; Fruttero & Gauri, 2005). Additionally, NGOs also tend to be more active in easily accessible, more democratic countries instead of in difficult environments. Poorer countries are more often chosen for the

implementation of programmes, NGOs have a preference for countries that are similar to that of their origin, such as when they share religion, and finally, NGOs are inclined to go there where other NGOs are already present. (Fink & Redaelli, 2011; Koch *et al.*, 2009). For example, UNHCR's budget for the Middle East and North Africa region was higher than for the Sub-Saharan Africa region, even though the needs and caseload was higher in Sub-Saharan Africa (Verme & Gigliarano, 2019). These tendencies are not in line with any of the humanitarian principles. Fruttero & Gauri (2005) found that NGOs do indeed make decisions with future funding in mind, and that an NGOs' location choice would be different if they weren't so dependent on external funding. However, both factors (funding and charitable considerations) have an influence on NGOs' decisions, meaning that while donors have an impact, it is not the sole or determining factor in an NGOs decision (Fruttero & Gauri, 2005). Having said that, because there is a lack of funds, organisations increasingly feel the need to play the 'funding game', where good proposal-writing skills and the clever use of buzzwords come in handy. Agencies that are more eloquent, politically savvy and strategic are more likely to come out on top and receive more funds than organisations that do not possess the same skills (Ancker & Rechel, 2015). Moreover, organisations that manage to obtain funds then try to prevent other organisations from entering the funding game, creating mistrust and secrecy both between and within organisations. By following 'the rules of the game', NGOs focus on areas for which funding is available, sticking to donors' priorities (*Ibid.*). This also reinforces the imbalance of power that exists between NGOs and donors (Reith, 2010).

However, it is argued that NGOs behave flexibly, are innovative, more cost-efficient than state agencies and are able to identify true local needs (Vivian, 1994). Additionally, other research challenges the findings that an NGO's decision on aid allocation is influenced by donors (Nancy & Yontcheva, 2006). The researchers built a database using data collected from the European Commission, financier of European NGOs. They find that aid allocation decisions by NGOs do not follow EU policy. Instead, to explain previous research results such as that of Fruttero & Gauri (2005) that found evidence that NGOs are influenced by donors, Nancy & Yontcheva argue that what Fruttero & Gauri found was actually NGOs imposing a self-selection bias, and not donors influencing NGOs (2006). However, for their database, Nancy & Yontcheva (2006) they only used the most prominent NGOs as representatives for the entire NGO sector, which created a rather homogenous image of the sector and failed to reflect the diversity of the NGO

field (Davis, 2019). Nevertheless, it was found in earlier research too that when agencies apply for funding, they tend to present situations in such a manner that highlights certain problems to which the agency then has the solution in order to obtain funding, thus imposing a self-selection bias (Darcy & Hofmann, 2003). Other scholars were also curious to see to what extent donors have an influence on emergency assistance, and whether or not media coverage and stakeholder commitment exert an even bigger influence on NGOs' decisions. Their starting point was that media coverage is most dominant in determining the level of emergency assistance, but the conclusion was that in fact donors are far more influential than media attention or stakeholder commitment in determining the implementation location (Olsen, Carstensen, & Høyen, 2003). This is endorsed by later research, that found that donors are indeed putting pressure on NGOs to demonstrate certain results, such as meaningful engagement with local communities, i.e. "beneficiary" empowerment (Crack, 2019).

Other than the tendency of NGOs to listen to their donors in terms of *where* they should implement aid, donors are also influential in determining the contents of the implementation programme (Verme & Gigliarano, 2019). When organisations from the United States and Europe were developing intervention plans for Sudan and Somalia, the US government and the European Union were dictating the sectors (such as food and livelihoods) in which the agencies could provide assistance as well as determine the objectives (Darcy & Hofmann, 2003). More recent research also shows that donors are imposing policies without taking the local realities into consideration, and that NGOs have as a result changed their proposals and reports in order to meet donor expectations, thus bypassing the real needs on the ground (Ancker & Rechel, 2015). In the case of Kyrgyzstan, the response to the HIV/AIDS epidemic was strongly weakened because the interplay between NGOs and donors had led to an intervention that did not fit the local context. Additionally, the funding scheme gave rise to corruption, as well as undermined the government of Kyrgyzstan (*Ibid.*). The reason why donors want to have a say in the first place is because donors themselves are also put under pressure, particularly by national news agencies, to spend the money in good and effective ways. On top of that, donors, like other international organisations, make commitments, such as pledging to align with the Sustainable Development Goals (SDGs) (Crack, 2019). While only very few donors have the ability to coerce organisations into making decisions aligned with donor policies, most benefactors do possess the potential to shape the ideas of policy makers

and can choose which NGOs they support (Béland & Orenstein, 2010). Whether or not an NGO can respond to crises relies on the willingness of donors to fund the response (Darcy & Hofmann, 2003). The dependence of NGOs on external funding has as a result that NGOs cannot always reach their desired objectives in fear of jeopardizing future funding (Fruttero & Gauri, 2005). There is increased competition between NGOs for funding, which obligates them to show observable and short-term results to ensure future donations. For this reason, NGOs can be hesitant to go to the more difficult environments, and Davis (2019) found that Canadian ODA actually distributes a higher percentage of their funds to the Least Developed Countries than Canadian NGOs. NGOs continue to struggle to match with donor agendas, as their funds rarely come free of conditions (Reith, 2010).

When organisations are expanding, their funding origins shifted from primarily private donors to predominantly institutional donors (Nancy & Yontcheva, 2006). Public funds are increasingly provided to NGOs instead of state actors, because NGOs are seen as representatives of those most in need as well as being more cost-efficient in reaching them (*Ibid.*). In order to legitimize this transfer of public funds, donors are putting pressure on NGOs to come through on these assumptions (Kajimbwa, 2006). Simultaneously, NGOs are imposing a self-selecting bias and opt for funding for locations and programmes that they think donors want to see. At the moment, the trendiest solution is the digitalization of humanitarian aid, specifically when it comes to the provision of cash transfers.

### 3. Methodology

When I started this thesis, I initially wanted to look at how inclusiveness is determined in digital cash transfer programmes, and whether this is an improvement compared to inclusiveness in non-digital in-kind programmes. However, moving forward with the data collection, it became clear that NGOs decide on inclusiveness and targeting before the modality is decided, thus there is hardly any difference in inclusiveness in digital/non-digital, cash/in-kind programmes. The vulnerability criteria do not change, and the targeting methods also remain similar. This is in itself interesting, because some respondents claimed that, by using technology and digital cash transfers, they are better able to reach the most vulnerable people with their programmes. Consequently, I tweaked the objective and since aimed to discover how aid workers perceive the future of digital cash programmes, who really benefits from them. I have chosen to focus on aid workers, because they both understand the changes taking place in their workplace (which are mainly offices in the West), as well as know what the situation on the ground is and how the two are compatible. The technological innovations mostly take place in the West, with the non-western countries not necessarily in the innovators' minds. This means that technology that is developed in the West, following Western norms, cultures and beliefs, are without change implemented in a context with different norms, cultures and beliefs. To understand why this is happening, I also focus on the donor element in the decision-making process. This research has combined semi-structured interviews with extensive desk research.

#### 3.1 Interviews

To research the opinions and beliefs of aid workers, I chose a qualitative design for this study to ensure that respondents had plenty opportunity to provide in-depth details on the topics at hand. The first method that I used for this research is semi-structured interviews. I did not use structured interviews because this is more fit for quantitative studies, as it does really not allow to deviate from the list of prepared questions (Edwards & Holland, 2013). It is convenient to have this flexibility, however, since it creates an interactional dialogue between the interviewer and interviewee. The interviewer can ensure that relevant topics are discussed, but the meanings and understandings will be a co-constructed creation (Idem). Questions were asked regarding the decision-making processes, such as “which actors were

involved in deciding the modality of the programme?”, “how were the decisions made?”, “what can you say about power differences involved in the decision-making processes?” and “what have you found to be risks that accompany the technology that would have been avoided otherwise?” and vice versa “have you found that not using technology could lead to risks that could be avoided with use of technology?” The complete interview guide can be found in appendix A. What makes semi-structured interviews different from structured interviews is the freedom to deviate from the interview guide. Thus, while the interview guide acted as a guideline during the interview, depending on the answers of the respondents or the course of the conversation, some questions on the list were not asked or new ones were asked on the spot.

I held 23 interviews with aid workers from NGOs that are part of the Dutch Relief Alliance. The DRA responds to humanitarian disasters and armed conflicts around the world. Currently they have operations underway in Zambia/Zimbabwe (drought), Syria (life-saving assistance), South Sudan (flood), Sudan (conflict), Burkina Faso (life-saving assistance), Central African Republic (variety of urgent humanitarian needs), Somalia (emergency assistance), Democratic Republic of the Congo (wide-ranging assistance), South Sudan (emergency assistance), Yemen (protracted emergency) and Nigeria (emergency assistance) (Dutch Relief Alliance, 2020). To get in contact with the aid workers, I had first e-mailed the offices of the 15 NGOs that make up the initiative, and sometimes additional phone calls were necessary to receive a response. To get an idea of how both aid workers from the headquarters think about the future of digital technologies as well as those aid workers in the field implementing the programmes and experiencing daily life in the field, I have used the snowball method to get in touch with aid workers from the field. The people I have interviewed from headquarters here in the Netherlands referred me to colleagues in one of their field offices. A list of the respondents can be found in appendix B. All interviews have taken place through skype, since this was the preferred means of the respondents, and due to the inability to travel to the field. I recorded all interviews, which allowed me to make notes of important quotes during the interview and to give me the ability to really listen to what the respondents were saying and advance the conversation, instead of being occupied with writing everything down. The tapes, transcriptions and notes delivered the complete data set of the interviews. I have conducted 23 interviews. Seven respondents were female, the remaining 16 male. Eight respondents

have a background that originated in the Global South, 15 in the Global North. Eight respondents worked in the field, 14 at offices in the West/headquarters and one worked equally at headquarters as in the field.

### 3.2 Literature Review

The second method of data collection of this research was a literature review to identify relevant books, articles and reports. I draw on academic literature, mainly journal articles, and grey literature, for example reports written by institutes such as the Overseas Development Institute and reports of the NGOs that I focused on, such as their annual reports. Found literature was also used as information base for other relevant literature, by looking up references and using Web of Science to do forward searches. The intended result was a complete picture of cash transfers, digital technologies and donor influences.

### 3.3 Data Analysis

Because I conducted a relatively small number of interviews, I decided against using data analysis tools such as Atlas.ti. The analysis consisted of looking at the data and trying to find patterns in the thoughts, perceptions and quotes to detect specific issues and themes. After the first few interviews, I realized that I had to adjust focus, as stated in the beginning of this chapter. Instead, I discovered other themes throughout the interviews that seemed to be quite important for the development of the humanitarian field in the near future, after which I changed the aim of my research. The data analysis was guided by the conceptual framework, looking at confirmation or rejection by the respondents of the risks and benefits of cash and technology, donor influences and who really benefits from digital cash based assistance as stated in the conceptual framework.

### 3.4 Ethics and Limitations

To conduct this research in an ethical manner, I have made sure that the rights of the respondents are not put at stake in any way. The recordings, transcriptions and notes are stored in a secured file that only I have access to. Furthermore, the results are anonymised in this thesis, ensuring the privacy of the respondents. Any statements in this thesis cannot be traced back to those who made the statements.



The scope of this research was limited in several ways. First, I only looked at the perspective of aid workers who work for NGOs. Those affiliated with International Organisations, such as the World Food Programme (WFP), were not interviewed for this research, thus what is happening in their programmes was not taken into consideration. Second, the starting point of this thesis was to interview aid workers affiliated with Dutch NGOs. When looking at the results through the lens of other cultures, the conclusions could be different. Like every person, I too am a product of my culture, gender, age and others, and this defines the way I look at the world and the results of my data collection. Because I am aware of this, I tried to constantly ask myself whether another researcher would reach the same conclusions based on these results, therefore I have eliminated this limitation to the best of my abilities. Then, the use of digital technologies, though spreading fast, is still very innovative. The respondents' perceptions of the future of digital cash programmes are based on the current reality, but in 5 or 10 years' time that will most likely be a different reality. This is particularly the case with aid workers from organisations that only very recently started to use digital technologies, and are mostly in a start-up/trial-and-error phase. If and when the implementation of DCT is more common, aid workers might have a better idea of how they feel about this. Since this research takes place in a determined time-frame, there was nothing I could do to remove this limitation.

#### 4. The Different Cash Transfer Programmes and Technologies

This chapter will first give a short overview of the different Cash and Voucher Assistance programmes and the types of technologies that are being used right now. It will demonstrate that organisations have different reasons to choose cash as a modality and to use technologies, which brings this back to the research relevance of who really benefits from cash and technology. That is what the remainder of the chapter will discuss before I draw conclusions.

There is not one single type of cash programme. The most basic division that can be made within cash programmes is conditional versus unconditional programmes, and restricted versus unrestricted cash (Roelen, Longhurst, & Sabates-Wheeler, 2018). Conditional cash programmes have the component that recipients first need to meet certain requirements, for example recipients can only receive the distributed money if they send their children to school, or follow a course on how to establish a small business. The most common example of a conditional cash programme is Cash for Work (CFW), where recipients have to perform tasks within their community in order to receive a sum of cash. Unconditional cash then means that recipients do not have to meet any requirements to receive cash, it is simply given to them. Moreover, there can be restrictions as to what the received amount can be spend on. In restricted programmes, usually vouchers, the organisations decide for which items the recipients can use their money. In these single purpose programmes, recipients are restricted in their freedom, and can for instance only spend their money on food or they can only use their vouchers at certain shops. With unrestricted, or multi-purpose, cash, the recipients are free to spend their money on whatever it is they need or want.

Simultaneously, there are different digital technologies available that organisations can use in their programmes. At this point in time, the option that is mostly used by organisations is to transfer money in a digital manner, such as via mobile phones or cards. In this case, instead of having to go to a pick-up point and walk around with a bag of cash, recipients are registered and receive the sum on their phones or they receive a (bank) card. This approach comes with the increase in the use of biometric data for registration purposes. While iris scans are a possibility, none of the respondents have experience with this, the organisations that use biometric data opted to use fingerprint scanners instead.

## 4.1 Motivations for Cash

There are numerous reasons why organisations decide to implement a programme that has a cash component. As was stated in the introduction, the aspect of dignity/empowerment is seen as the most important reason (Bailey & Harvey, 2015), and the respondents also cited this as the number one reason to choose cash over in-kind goods. By providing cash to recipients, the organisations acknowledge their capacities: the recipients themselves can choose when they buy their items, what they want to buy and how much they want to buy of it. Organisations provide them with a sense of dignity, as opposed to solely delivering food (respondents 1<sup>1</sup>, 4<sup>2</sup>, 6<sup>3</sup>, 11<sup>4</sup>, 12<sup>5</sup> & 15<sup>6</sup>).

*“It is a right of them to get what they want, and not what we think they would want.” – Respondent 12<sup>7</sup>*

Other respondents made similar statements, saying that they recall having distributed items without knowing whether people like or even eat this food or not, whether or not they use this kind of non-food item in their daily lives or not (respondent 14<sup>8</sup>). Moreover, the recipients know best what it is that they need, one uses the money to pay for school fees, while another uses it to buy food (respondent 17<sup>9</sup>). But, I asked the respondents, if the money can be spent freely, it would also be possible to spend the money on items for which it is not intended? The respondents acknowledge that cash brings freedom and that this is a positive aspect, but some recipients do buy products such as alcohol, and that is the downside (respondent 1<sup>10</sup>). When I asked others about their experiences, I was given the answer that yes, some recipients indeed buy unnecessary items with the distributed cash, but the majority of the money, amounting up to 80%, is spent on food alone (respondent 3<sup>11</sup>).

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<sup>1</sup> HQ, Male, Global North

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<sup>3</sup> HQ, Male, Global North

<sup>4</sup> HQ, Male, Global North

<sup>5</sup> Field Office, Male, Global South

<sup>6</sup> HQ, Female, Global North

<sup>7</sup> Field Office, Male, Global South

<sup>8</sup> Field Office, Male, Global South

<sup>9</sup> HQ, Female, Global North

<sup>10</sup> HQ, Male, Global North

<sup>11</sup> Field Office, Male, Global North

The provision of cash as opposed to in-kind goods means that recipients can much quicker receive aid, as the response time of providing cash is shorter than that of handing out goods (respondent 9<sup>12</sup>). With cash projects, organisations do not have to spend as much money on logistics anymore, which one respondent claimed ensured a larger scope of the operation than when in-kind goods were distributed. Within their organisation, the provision of in-kind goods was twice as expensive as that of cash, and the money that was saved on logistics was used to also distribute to the people affected (respondent 2<sup>13</sup>). This sounded very promising, apparently cash not only provides recipients with more dignity, more people can now receive aid due to the cost-efficiency. However, more respondents stated that indeed cash projects are more cost-efficient, but no this saved money did not end up with the recipients. The scope of the project was already determined *before* the decision was made to use cash instead of in-kind goods (respondents 5<sup>14</sup>, 6<sup>15</sup> & 9<sup>16</sup>).

The use of cash also has the possibility of stimulating the local market, because recipients can spend their received cash or vouchers at the local vendors (respondents 2<sup>17</sup> & 11<sup>18</sup>).

*“Cash was by far the most logical option. As a humanitarian partner, you don’t want to disrupt the market at all.” – Respondent 3<sup>19</sup>*

Some organisations have only recently started to consider cash, and they have quickly come to the realisation that it can be a better option than in-kind aid because it will not disrupt the local markets. After assessing that the markets were actually functional and that the infrastructure was good, meaning that the main transport routes that people use to access the area were not destroyed or dangerous, the organisations chose to implement a cash programme rather than provide in-kind goods.

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<sup>12</sup> HQ, Female, Global North

<sup>13</sup> HQ, Male, Global North

<sup>14</sup> Field Office, Female, Global South

<sup>15</sup> HQ, Male, Global North

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<sup>17</sup> HQ, Male, Global North

<sup>18</sup> HQ, Male, Global North

<sup>19</sup> Field Office, Male, Global North

The above-mentioned benefits were stated for all the cash programmes, but there are of course different options. Some organisations prefer working with conditional cash programmes, especially cash for work. These organisations consider this to be a win-win, because communities provide the input for what needs to be fixed in the area to get everything up and running again, while simultaneously they are receiving cash. This approach should lead to even more empowerment, because working for money provides greater self-esteem and dignity than simply receiving cash (respondent 6<sup>20</sup>). On the other side, there are many organisations working with restricted cash programmes, but this seems to be more out of necessity than actually favouring that approach. Multi-purpose cash is quite a new phenomenon, but organisations see added value to restricted cash over in-kind goods regardless. One respondent has mentioned that their organisation works only with vouchers with which a recipient can buy for example two cows. Even with this restricting voucher, there is some form of empowerment because the recipient can at least choose which cow they want to buy where. Logistically it also makes more sense, it is a lot faster to hand out vouchers than when the organisation would buy and hand out all the cows, and you also stimulate instead of disrupt the local market (respondent 9<sup>21</sup>). But, the majority of the respondents favoured unrestricted and unconditional cash over conditional and/or restricted cash.

*“We worked mostly in rural areas, where often there is a large informal market where goods are much cheaper. If you hand out vouchers, recipients cannot go to these markets but they have to go to the more expensive supermarket.” – Respondent 20<sup>22</sup>*

The use of restricted cash in this case would have led to additional problems, aside from the empowerment aspect. It is thus very important to have a good understanding of the local context before organisations make a decision about the cash modality they are going to implement.

Not only are assessments necessary to determine the type of cash programme, there needs to be careful consideration whether cash is appropriate at all. One of the most important

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<sup>20</sup> HQ, Male, Global North

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<sup>22</sup> HQ, Male, Global North

considerations to take into account are the financial literacy levels of the recipients: how do organisations make recipients aware of how much money they have, how they can spend it and what they can buy with it (respondent 2<sup>23</sup>). Furthermore, five respondents have expressed the importance of a market assessment to determine whether or not the market is stable enough for the cash injection, such as does it have the ability to cover the demand, and won't the injection increase the risk of inflation. If this is the case, people not included in the programme will be worse off or suddenly not able anymore to meet their own needs.

*“Cash and Vouchers does not necessarily change the work that you are doing, your programming, because you still have to do the same thing, make the same analyses. The only thing I see is that it is advantageous in time, and sometimes in safety, but it is always dependent on the context. Sometimes people think ‘ah you just have to implement cash and then everything is solved’, but it doesn’t work like that. It is just a modality.” – Respondent 18<sup>24</sup>*

In the end, although there are many benefits to cash in the right context, cash programmes are not going to solve the funding problem in the humanitarian sector, so let's turn to technology.

## 4.2 Motivations for Technologies

*“These days, innovation and blockchain are everywhere, but those are flashy terms. It is very tempting to want to develop something flashy, for example, if someone is working on a regular database and it is just working fine, everyone wants to shift to blockchain because it is the flashy tech. But for us, it is always about the need at the field.” – Respondent 13<sup>25</sup>*

It is clear that organisations have to deal with (external) pressure when it comes to developing their programmes. Organisations need to find a balance between writing successful proposals that comply with donor demands to receive money for programmes, while those programmes also need to address the needs on the ground. When I asked the aid workers what their

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<sup>23</sup> HQ, Male, Global North

<sup>24</sup> HQ, Female, Global North

<sup>25</sup> Field Office, Male, Global South

organisations motivations were to use certain technologies, they first and foremost started to talk about the ways it was beneficial for both the recipients as well as the organisations. The motivations behind those motivations (i.e. the donor push) will be addressed in the next chapter.

Cost-efficiency is a much-cited reason by the respondents for their organisations to use digital technologies in their cash programmes. Recipients receive aid much faster, and in addition, the vendors and organisations benefit from using technology as well. Before using electronic vouchers, respondent 13's organisation worked with paper vouchers. With the paper vouchers, recipients went to the vendors, who had to collect all the vouchers and then take it to the organisations regional office. The regional office staff had to then verify all the vouchers from about 35 vendors participating in a programme that lasted several months, which is a huge chunk of files. Several vendors were not paid for three months because the verification took so long. When they switched to a digital system, the huge chunk of files reduced to some printed pdf reports and excel sheets, which were easy enough to verify, and all the vendors were paid within a week (respondent 13<sup>26</sup>). By using technology, recipients, vendors and organisations receive what they need much faster, and time is money.

Another important reason to use technology is to prevent misappropriation and fraud. When organisations use digital technologies for registration, they can easily detect ghost recipients who pretend they are on the list but are in fact not, which significantly reduces misappropriation of resources. This is something that organisations deal with a lot, as six respondents emphasised this benefit. In addition, it happens that a person that is on the list to receive aid, receives it more than once. This case of double dipping can also be avoided if a method such as fingerprint scanning is used, because it makes it much easier to verify whether or not a person has already received their cash (respondents 3<sup>27</sup>, 7<sup>28</sup>, 9<sup>29</sup> & 14<sup>30</sup>). Also, the use of technology shortens the chain. The organisation can manage everything remotely instead

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<sup>26</sup> Field Office, Male, Global South

<sup>27</sup> Field Office, Male, Global North

<sup>28</sup> HQ, Female, Global North

<sup>29</sup> HQ, Female, Global North

<sup>30</sup> Field Office, Male, Global South

of having to delegate power to other parties that are on the ground, which would increase the possibility of corruption (respondents 3<sup>31</sup> & 11<sup>32</sup>). Of course, organisations want their aid to end up with the people they have identified as most in need, so technology is in this case a major problem solver.

Often recipients lack official identification documents which makes verification difficult. Having a system that could create its own method of verification means organisations can help people who would otherwise possibly not be part of the programme, or it would be more difficult to ensure they are part of the programme (respondent 5<sup>33</sup>). It increases effectiveness. It is also possible to use biometric data not for registration purposes, but to verify whether or not a household has received the aid. This easier and cheaper process can release a lot of funding and resources that can then be used to increase the scale of the programme (respondent 15<sup>34</sup>). The use of biometric data not only solves the problem of misappropriation and fraud, it plays a part in making sure that everyone that is entitled to aid has received it.

Another important aspect is safety. Safety for the recipients is increased, because they now do not have to walk around with bags of money but simply receive the amount on their phone or bank card, but also the safety for the organisations' staff is increased.

*“If say every beneficiary is supposed to receive 5000 shillings every one or two weeks, and you have 100 or 1000 beneficiaries that you need to reach. Can you imagine the magnitude of that operation of having to give 5000 shillings to 1000 people? You are working with 5 million. That is a lot of money and they would simply come for you and to people at the distribution centres. These are things that have happened here.” – Respondent 8<sup>35</sup>*

Organisations rarely use cash in envelopes anymore, they rather opt for digital means to transfer the money. Cash in envelopes as a modality is only used when there is no other choice

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<sup>31</sup> Field Office, Male, Global North

<sup>32</sup> HQ, Male, Global North

<sup>33</sup> Field Office, Female, Global South

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<sup>35</sup> Field Office, Male, Global South



(respondent 2<sup>36</sup>). Physical cash is possibly harmful for the communities, and using digital technologies can mitigate those risks. But it does not only improve safety on the delivery end, it also improves security on the registration side. Organisations are moving to higher technological platforms and away from Excel, because that also created security risks. Excel sheets are shared, either through dropbox or e-mail or unencrypted USB drives, and that was exacerbating the risk of keeping recipients' data safe (respondents 20<sup>37</sup> & 21<sup>38</sup>).

Mobile money may not be that common here in the Netherlands, but in some developing countries it is a well-known modality. For example, in East Africa mobile money is a common payment method (respondent 2<sup>39</sup>). Furthermore, also in economically less stable countries (such as Sudan and Zimbabwe) do people use mobile money transfers. Three respondents have told me that because in these countries the currency fluctuates so fiercely, it is almost impossible to pay with physical cash, so people fall back on digital cash. These countries are more advanced in digital cash than we are here in the West, so organisations adjust their programmes to fit into that reality. It is *because* the people in these countries already depend on mobile cash, that it makes it logical to then also use mobile cash when providing emergency aid.

Faster delivery, safety and familiarity are worthy reasons to choose for digital delivering methods as opposed to low-tech ones, but there is one more reason organisations favour high-tech platforms. When a programme is digitalised, organisations can keep track of the purchases that recipients make. Respondents have ensured me that their organisations do not track the purchases so that they can control and make sure that the money is spent on food, but to see what the priorities of the communities are, where they are spending their money and what they are buying with it (respondents 10<sup>40</sup> & 11<sup>41</sup>). This monitoring can also show the organisation which households have been part of a previous programme, and whether one household has received all the aid and another nothing at all. It would be very difficult to

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<sup>36</sup> HQ, Male, Global North

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<sup>39</sup> HQ, Male, Global North

<sup>40</sup> Field Office, Male, Global South

<sup>41</sup> HQ, Male, Global North

discover with manual processes (respondent 13<sup>42</sup>). Such information can then be used to design the next programme which will be better tailored to the local needs. But, even if it is genuinely not the organisations intention to misuse this information, they still possess sensitive data that could fall into the wrong hands. This risk will be further addressed in chapter 6.

Not only is it worrying that so much of the recipients' data is stored, organisations should not favour 'flashy tech' over appropriateness.

*"People are smart. They will learn quickly, especially when there is an interest in it for them" – Respondent 19<sup>43</sup>*

The provision of aid should not be conditional on whether or not people are able to learn how to use technologies. Some simply cannot learn, perhaps because they are older (think of how many elderly people are struggling with technologies in the Netherlands) or they are illiterate so you have to tackle other issues first. Some also may not want to learn, or they do know how to use technology but favour low-tech options. Fortunately, more aid workers agree than disagree with this point of view. Organisations can choose to only use technologies when they have made sure that there is full comprehension of the modality from the recipients so that the intervention does not cause confusion (respondents 15<sup>44</sup> & 21<sup>45</sup>). Or organisations can choose to use several delivery methods in a single intervention. This option is chosen because some organisations consider it a first priority to make the lives of the recipients easier, and if within the group of recipients there are different preferences, organisations can use different methods (respondent 7<sup>46</sup>). The bottom line is that organisation should not turn to technology for the sake of using technology or because it is the latest fashion, but because it actually benefits the recipients.

Moreover, (digital) cash is only a means to an end, cash alone is never enough to fulfil people's needs. This is something that most respondents mentioned. Organisations provide aid to

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<sup>42</sup> Field Office, Male, Global South

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<sup>44</sup> HQ, Female, Global North

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<sup>46</sup> HQ, Female, Global North

people affected by conflict and/or disaster. This usually means that the people affected are traumatized, or at least require aid that improves upon mental wellbeing. Handing out cash could never achieve that. In addition, most programmes have a protection aspect, another thing that cannot be replaced by cash. Respondents have therefore stressed that cash is only a modality, and not a programme in itself.

### 4.3 Conclusion

Within cash programmes, there are several options to choose from. Unrestricted and unconditional cash offers the most dignity, as conditional and/or restricted programmes still limit the freedom of the recipients somewhat, albeit their freedom even with those interventions is still greater than when people only would receive in-kind goods. The argument that cash can be spent on items for which it is not intended also does not last, because in-kind goods can also be sold and the yielded money can then be spent on anything anyway. Other than the benefit of dignity and freedom, cash has the ability to stimulate the economy, although a careful market analysis needs to make sure that the injection of cash does not lead to inflation. Then, respondents overwhelmingly mentioned that cash projects are more cost-efficient than in-kind interventions, yet this saved money did not make its way to the recipients in most organisations. Of course, humanitarian interventions are ever developing, but especially in this area there is still a great deal to be gained. It is also important to remember that there are many conditions that have to be met for cash to be an option, such as a functioning market, proper infrastructure and recipients' preferences. There seems to be a large focus on cash, but only a small number of projects actually has a cash component. The development of in-kind programmes should still be on the foreground.

There are several reasons why technology can be positive for cash programmes. Scientific research has demonstrated that using technology to transfer money is much safer, and aid workers underline this point. A faster response time and familiarity are two other good reasons that favour the recipients, and the prevention of misappropriation and fraud is likewise a favourable outcome. Despite its many advantages, like cash, certain conditions have to be met in order to use digital technology components. Network needs to be in place, local authorities have to approve and the people affected should want and be capable to use it as well. More importantly, there are still also many concerns. Yes, by moving away from excel to

a biometric registration system, organisations have eliminated some safety risks, but they have also created new ones. How come using technology is so much at the forefront then? That is what will be examined in the next chapter.

## 5. Drivers for Change

In the previous chapter I delved into the motivations of organisations for using cash and technology in humanitarian interventions. This chapter will tackle the motivators *behind* these motivations. Who are the drivers for change when it comes to humanitarian programming, in particular the change towards digital cash transfers? I will first discuss the influence of donors on NGOs before moving onto the influence of other actors, such as the Dutch Relief Alliance and host-governments. I will then close this chapter with a conclusion.

### 5.1 Donors

According to Davis (2019), Crack (2019), Ancker & Rechel (2015), Koch, *et al.* (2009) and Fruttero & Gauri (2005), donors have a significant influence over the programmes of NGOs. Also, donors consider the use of cash and technology as more cost-effective modalities, which means that humanitarian operations are increasingly implementing programmes with a digital cash component, even if they are not ready for it.

*“I see some countries picking up technology when they don’t have the capacity to do so on the agency side.” – Respondent 15<sup>47</sup>*

Aid workers say that (their) organisations are ready to use more advanced technologies when they have the expertise and capacity to do so (respondents 4<sup>48</sup>, 15<sup>49</sup> & 17<sup>50</sup>). If one of the two is absent, however, —i.e. if agencies use certain technologies without having the appropriate capacity or expertise— this is a harmful process. These risks are of extra importance considering that NGOs operate from the principle to ‘do no harm’. When I asked the respondents about their organisations’ motives for using digital cash transfers, they mentioned similar reasons such as safety, empowerment, prevents misappropriation of resources and it makes it easier to implement. But what they initially lacked to say was that there is a significant donor push and that they do indeed see this happening. When I specifically asked about who are involved in the decision-making process, it became clear that digital cash projects are not necessarily implemented because only the organisations think it

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provides safer and faster programmes (though one respondent claimed that there is no donor push).

*“Donors like technology for a lot of reasons: risk mitigation, traceability of funding, the presumption that technology supports scale. So that push from donors comes from the reality that scale equals cost efficiency, and also on the risk mitigation side.” – Respondent 15<sup>51</sup>*

Donors are significant drivers for change, and not only because digital cash programmes provide for cheaper and faster aid. There is a push for technology, simply because technology is part of the information age.

*“Whether we like it or not, it is going to change us.” – Respondent 12<sup>52</sup>*

*“It is therefore a reason to keep up with the times. It is something modern, as an organisation it is also good to embrace that, also to receive money from donors.” – Respondent 4<sup>53</sup>*

Another reason why NGOs want to comply with donor standards, is because of the ‘funding game’. Funding is limited, and in order for the organisation to survive, they have to beat the others to ensure they receive funding.

*“Humanitarian agencies are not only there to provide aid. It is like selling the service, for example who can serve the beneficiaries better, in an easier manner?” – Respondent 13<sup>5</sup>*

Humanitarian organisations rely entirely on donor contributions to execute their programmes. These donations are hard to come by and generally are less than the amount needed to aid all the people affected by crises (Verme & Gigliarano, 2019). Consequently, it is not surprising that NGOs feel the need to participate in the funding game and that they are influenced by donors’ wishes in order to obtain (more) funding.

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However, this donor-driven idea that technology is the way to go in every situation, regardless of what context, is not shared by the aid workers.

*“The actual use of technology is when you provide financial literacy, when you provide the technology infrastructure. These different types of pilots, they are done by organisations without them considering what is the ground reality, and this is not actually supporting technology.” – Respondent 10<sup>54</sup>*

*“I think cash and technology is favoured by more and more donors, but it has to fit in the local context, that is the most important aspect. That will always be guiding.” – Respondent 17<sup>55</sup>*

So, although donors might inform organisations of their wishes and requirements, NGOs are not powerless bystanders who listen uncritically to donors. Respondents insisted that the needs on the ground are always guiding. It resolves around the problem that the field is facing, and based on that, solutions are developed. These solutions could possibly involve digital technologies, but if organisations are implementing a technology just for the sake of putting it in, at the end of the day it does not solve the most pressing needs that recipients have.

At the same time, donors are not ignorant of the risks that are involved with using digital technologies. Yes, there has been a huge push from donors, but likewise they also push organisations to be responsible.

*“Some donors work out of that window of how do we move from wanting to use technology to using it in an appropriate and effective means” – Respondent 15<sup>56</sup>*

Donors are concerned with the security risks, and want to make sure that organisations are compliant with the European Union’s General Data Protection Regulation (GDPR) which ensures that there is one set of data protection rules for all organisations operating in or from

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the EU (respondent 13<sup>57</sup>). Moreover, it is not fair to paint the picture that NGOs are implementing programmes solely because donors tell them to do things this and that way.

*“Of course, sometimes we want to start projects, and then they are not approved by certain donors. So, to some extent you still have to fit into the structure which the donors says is agreeable. You basically have to agree to certain standards. There is a say in it from the donors’ side, on the other side we develop the project, and if we say we don’t agree with it then we will not implement the project. Donors have a say in it, but I would not say that we are completely at the mercy of the donor.” – Respondent 3<sup>58</sup>*

Likewise, just because donors have certain wishes, it does not mean that an NGO automatically thinks the opposite. Even though there is a push from donors, the organisations do not necessarily see that as a bad thing, because they agree with the reasons of the donors (respondent 12<sup>59</sup>).

Yes, donors have an influence. If donors reject a proposal, that programme cannot be implemented. They have significant power to say that they want to see certain things happen, otherwise they will not provide funding. However, NGOs are not mindless obedient organisations. They have a mandate and values, and stand behind them. They too have the power to decide not to implement programmes.

## 5.2 Dutch Relief Alliance

The Dutch Relief Alliance profiles itself as a coalition that improves cooperation and coordination between NGOs, and while that may be an important aspect of the DRA, it also acts as a donor. Similar to how organisations write proposals directly for donors in order to obtain money for programmes, the DRA is an intermediary in that process. It receives money from the Dutch Ministry of Foreign Affairs, and it distributes that money between the 15 affiliated NGOs based on their proposals. This means that even within the DRA, NGOs have to play the funding game, and they compete with the organisations they also have to cooperate

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with. One example is the DRA Innovation Fund (DIF), which distributes its money to projects that have an innovative component. That the DRA likes innovation also becomes clear from their homepage, where they list their pillars such as localisation and accountability, and indeed, listed as the first (and can therefore be seen as their most important) pillar: innovation (Dutch Relief Alliance, 2020).

A respondent said that the DRA is a more flexible donor than institutional donors, and that with money received from DRA they have more freedom to make the decisions they want to and have fewer demands to stick to (respondents 11<sup>60</sup>). Likewise, another respondent has said that the DRA does not just push for technology and leave it at that. Within DIF, if an NGO wants to qualify for the funds, they need to show in their project proposal that the innovation they want to implement is not just for the sake of innovation. The proposal needs to contain a problem statement that shows what the problems are, and how current innovative measures are not appropriate to solve the problem at hand (respondent 16<sup>61</sup>).

Nevertheless, within the DRA there is a clear push for innovation, therefore the affiliated NGOs have a huge incentive to innovate. Within their Joint Responses, the DRA looks at which NGO is best positioned to deliver aid (respondent 1<sup>62</sup>), for instance with cash aid. This makes sense of course, because if organisation A has better expertise and capacity to implement the cash component of a project than organisation B, it would be inappropriate to give the assignment to organisation B. However, this has as a result that organisations realise that if they want to be the organisation to implement a project, they have to innovate or they will not be considered.

*“Humanitarian agencies are not only there to provide aid. It is like selling a service: who can do it better?” – Respondent 13<sup>63</sup>*

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### 5.3 NGO coordination

In the areas where the humanitarian programmes are implemented, the DRA members not only have to coordinate with each other, but also have to deal with the presence of, and therefore coordinate with, other international NGOs. It is usual in humanitarian crises that the United Nations establishes a cluster system, with a cluster for food security, a cluster for shelter and others. Within these clusters, all NGOs come together and create common standards and perform assessments together. So, it is decided together, within these clusters, whether cash and technology are the right modalities (respondent 9<sup>64</sup>). It makes sense that such coordination takes place, to prevent some households from being included in all the programmes and some in none of them. Or, without coordination, it could happen that one organisation decides on a certain amount of cash that individuals should receive, while another organisation hands out double that amount, or half.

Within the working group the organisations make decisions together on aspects related to the different clusters, thus it is ensured that every organisation that operates in the area has the same approach. However, the influence that the working groups of the cluster system have is limited. The working groups are only there to provide the space for coordination: they work on harmonization and capacity building, amongst others (respondent 10<sup>65</sup>). The decisions are still made by the NGOs, and every NGO has its own objective.

*“As a cash working group, we don’t have any influence.” – Respondent 10<sup>66</sup>  
(technical co-lead of cash working group)*

The notion that aid is a service which organisations sell, is important here too. Because even though there is some coordination, it is still every NGO for themselves.

*“There are a lot of different technologies, and everyone has their own system. We have chosen to create our own system, and one can question*

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*whether that was necessary when so many NGOs have so many options.” – Respondent 2<sup>67</sup>*

Although there are several independent services, such as RedRose or WFP’s SCOPE, it is very common that NGOs develop their own card and hand that out to recipients. It happens then that, for instance within the same Internally Displaced Person (IDP) camp, vendors have to deal with cards from all the different agencies present there. When I asked why their organisation chose to develop their own system, respondents mentioned that the systems available did not live up to their demands, such as security and privacy standards (respondent 15<sup>68</sup>), or because governments set limitations, for instance governments do not want a digital economy in addition to the existing economy and organisations are therefore required to create a closed loop system so that it cannot be used as alternative currency (respondent 2<sup>69</sup>).

#### 5.4 Host-Governments

NGOs are not only dependent on donors, but also on host-governments. Similar to how donors and organisations can approve or reject a programme proposal, host-governments have a decisive say in whether or not a project will be implemented and thus on the aspects that need to be changed to satisfy governments.

*“It depends very much on the location which modality we use. In Yemen, we wanted to use vouchers, because that was the only modality that was approved by the authorities in that area” – Respondent 11<sup>70</sup>*

*“In East Africa, they use a lot of mobile money, so we looked into those options. In South Sudan that is already more challenging, because the government does not approve of mobile money so there you have your first restriction. It is impossible to get a project with a mobile cash component up and running, because that is too difficult to control for them. So, we had to create something that is closed-looped and cannot be used as an alternative currency, because that is what they don’t want. So, the creation and use of*

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*our own smart card was decided in accordance with the government.” –*

*Respondent 2<sup>71</sup>*

With host-governments, other than donors, there is not much room for discussion. If organisations want to implement a project in a certain country or area, they simply have to deal with the present authorities. If the host-government prohibits organisations from using a certain modality, there is nothing they can do about it. Organisations are then left with the options to change their project proposal in such a way that is in agreement with the authorities' demands, or they do not go into the area at all. Government involvement is accepted as a given according to the respondents, and there is little organisations can do about it except to deal with it.

## 5.5 Conclusion

In this chapter, it became clear that donors strongly push NGOs in a certain direction because donors need to prove that their funding of the projects is legitimate and effective. NGOs are expected to deliver on the assumption that they are better able than state agencies to reach those most in need in a more cost-effective manner. While there is no denying that donors indeed have an influence on humanitarian organisations, there is more to it. While they push for certain things, such as more use of digital cash transfers, donors are not careless. Donors are aware of the risks the use of technology brings for recipients and push organisations to implement projects that have a technology component in agreement with GDPR requirements and to check whether digital cash is truly the most appropriate modality. At the same time, it became clear that not only donors have an influence on whether or not agencies can carry out their projects. Host-governments can have significant influence, and to a lesser extent do the Dutch Relief Alliance and the United Nations have a say on the specifics of an NGO's programme. The most important conclusion that I draw however, is that donors are not almighty. Yes, they are very powerful, but in the end, the final word on whether or not a certain programme with specific characteristics will be implemented or not lies with the organisation, not the donor.

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## 6. Risks and Benefits of Digital Cash Transfers

In order to see whether digital cash transfers have a sustainable future in humanitarian programming according to aid workers, it is important to examine the risks and benefits that go accompanied with this particular modality. That is what I will tackle in this chapter. I will start with the risks, continue with the benefits and draw a conclusion on whether the benefits outweigh the risks.

### 6.1 Risks of Digital Cash Transfers According to Aid Workers

In the conceptual framework, I highlighted, amongst others, the downsides of using cash and technology in humanitarian programmes according to scholars. In this section, I will talk about the risks of digital cash transfers that the respondents have mentioned. One of the more common problems that organisations come across when using digital technologies, is a form of (digital) illiteracy amongst the people affected, and these systems of course demand that you know how to use them (respondents 2<sup>72</sup>, 4<sup>73</sup>, 9<sup>74</sup>, 10<sup>75</sup>, 19<sup>76</sup> & 20<sup>77</sup>). Vulnerable and marginalised groups run a greater risk of being excluded from a programme with a digital technology component than from one without.

*“With technology, you have to try harder to keep the marginalised groups on board.” – Respondent 20<sup>78</sup>*

It is likewise important to take into account the gender dynamics, because most often it is the women that are less digital literate than men. When an organisation selects the delivery method they need to make sure that everybody can use it, otherwise they could create more issues for the recipients (respondent 7<sup>79</sup>). If this is the case, the organisation can decide to not use technology, or it can decide to create a programme with more components and instruct recipients how to use these methods. Not having access to a phone is another problem that

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can occur, even in countries where the mobile phone penetration is high, such as in most East African countries. In this case, organisations can set up cash distributions points for those that cannot receive mobile money, or they would come to the communities so that the targeted persons can receive their money (respondent 8<sup>80</sup>). Another solution could be that the recipient could use a relative they trust to manage the money for them, but when I asked about the risk of abuse in that case, the respondent roughly said that this was the responsibility of the recipient, the organisation simply assumes that this trustee will get the money to the recipient (respondent 8<sup>81</sup>). In Chapter 4 it came to the fore that most organisations first decide where to implement a programme and who to include, and then look at the modality. However, respondents have said that it happens that an organisation wants to implement a digital cash programme and find that the preferred area is too difficult to reach with that modality, they then might leave that area and target another geographical zone (respondent 10<sup>82</sup>). In this case, the wish to use digital technologies affected some communities, and is in the end less inclusive than a programme without a technology component. Sometimes organisations make the easier choice, and some communities are easier to reach than others, which is a risk (respondent 17<sup>83</sup>). Overall, exactly the groups that NGOs are better placed to reach than official state agencies, namely the most vulnerable, are at risk when digital technologies are involved. Considering that this was a major reason for donors to fund NGOs instead of (or next to) state agencies, it is interesting that the programmes they push for have the opposite effect.

Another concern that needs to be addressed is the acceptance within the communities to use technology. The people affected should not get the feeling that the organisations are coming into their communities and they just have to accept whatever the organisations put in front of them (respondent 11<sup>84</sup>). This could create additional stress for the local communities, and aid workers could possibly not pick up that they are doing harm by using digital technologies,

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because the use of such technologies are so normal to us in the west, but that does not mean that the communities understand (respondent 21<sup>85</sup>).

*“There needs to be an agreement with the local communities, if you don’t have that, then you actually do not have the legitimacy to operate.” – Respondent 17<sup>86</sup>*

Though none of the respondents said that their organisation is forcing the recipients to accept whatever technologies they want them to use, it is something to take into account. The recipients can still get the feeling that if they refuse to work with a certain method or modality, that they will not receive aid at all, and therefore accept it because they feel they have no choice. The people affected are so dependent, and this is a challenge that you have to properly deal with (respondent 18<sup>87</sup>). This is not just a concern that aid workers think might happen in the future if we are not careful, it is something that is already going on.

*“Some agencies are taking the stance of making aid conditional, something like ‘you give me your data or you won’t receive aid’. That is what is happening in Yemen. But you can’t ask someone to give up their data for them to receive the aid.” – Respondent 13<sup>88</sup> (on biometric registration)*

It is important to take into account that collecting fingerprints can be quite an intrusive method, and that most often organisations are dealing with heavily traumatised people. Additionally, it is also possible to register people in another way, for instance when someone has lost their hands during war or if there are blind people. It is not a given that organisations can use this kind of technology for everybody (respondent 7<sup>89</sup>). And if NGOs create alternatives for those who cannot give up certain data, why not allow those recipients uncomfortable with the technologies to use the same alternative?

Using technology can lead to scale increase, but that does not mean it is always the appropriate means to use. Not only is there a need for user acceptance, it needs be user-

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centric in the first place. Increasing scale can also lead to other problems, for instance there is an agency that runs a country-wide cash programme where the cash is electronically distributed. The platform relates to a card, but if a household loses that card, it takes a minimum of two weeks to replace the card. This programme reaches everyone in the country, but the user is not having the most appropriate means of receiving assistance, because two weeks to replace a card to access a cash transfer is a really long time for a household that cannot meet their food needs. In the push to reach scale, there is this flipside that the technology is not necessarily user-centric (respondent 15<sup>90</sup>).

Nearly all respondents say that data protection is one of the biggest issues to tackle, yet none of them are stopped by this risk and start or continue to use digital technologies. Before using digital methods to store recipients' data, organisations also had to store data, even if it was paper based. One respondent thought that this does not pose the same risks, not of the same magnitude. Because with written data, organisations will find the same names for different people, and they are not sure which person matches which data. But if organisations use biometrics for instance, then they can track one person all over the world and they know for sure that they are the same person (respondent 14<sup>91</sup>). Yet two others explained that the paper or excel based storage of data poses more risks, as was elaborated on in Chapter 4 (respondents 20<sup>92</sup> & 21<sup>93</sup>). Most respondents have a favourable or neutral stance towards biometrics, but respondent 2<sup>94</sup> assertively stated that their organisation would not use this kind of data, because they think it impossible to guarantee that this data will remain secure. Another merely said that their organisation was opposed to the use of iris scanners, but they did use fingerprints for registration (respondent 3<sup>95</sup>).

When asked how their organisation deals with data protection risks, the respondents mention that this is an issue that is very high on their agenda, but they have measures in place to mitigate the risks. First of all, they make sure they comply with EU GDPR requirements

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(respondents 15<sup>96</sup> & 21<sup>97</sup>). The issue with privacy comes in when there is the possibility that you have to start sharing the data with other entities, such as a financial service provider, or the host-government, or any other company, and that you do not know whether or not they will use the data for other purposes. Agreements have been made and signed that should prevent misuse of recipients' data, and there are systems in place that are designed to avoid data sharing, that require approval from different people across different levels of checks (respondent 7<sup>98</sup>). Several organisations also have employed people specifically to make sure that they safely store all kinds of data (respondents 15<sup>99</sup> & 18<sup>100</sup>). Of course, sometimes organisations have to share the data, and contracts can be breached. Organisations hand over the recipients' data to the social safety net branch of the government, because those are the people that would take over the vulnerable groups once a humanitarian programme is finished (respondent 15<sup>101</sup>). If a new regime then takes over, organisations don't know if they will respect the old agreements, so another major concern is what will happen to this data in five or ten years' time?

A final risk that respondents mentioned is that of technology failure. Some humanitarian organisations work with digital technologies that cannot be used offline, if there is a malfunction, then no one can access their mobile money (respondent 1<sup>102</sup>). The same goes for organisations that partner with the private sector, if that company goes bankrupt then that would be quite a problem (respondent 3<sup>103</sup>). However, these are the worst-case scenarios that the respondents could think of, and none of them had actually experienced these things.

## 6.2 Benefits of Digital Cash Transfers According to Aid Workers

After having explicated the risks of using digital cash transfers in humanitarian aid provision according to aid workers, in this section I will highlight the benefits that digital cash transfers

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can bring according to aid workers. The most important benefit of digital cash transfers, and one that was already shortly discussed in Chapter 4, is safety. When organisations hand out physical cash to recipients it puts them at risk, because non-recipients can see that someone is receiving aid and could harm them if they have the wrong intentions (respondents 1<sup>104</sup>, 8<sup>105</sup>, 12<sup>106</sup>, 15<sup>107</sup> & 18<sup>108</sup>). Digital CBA mitigates this risk, which is a big plus in unsafe environments and countries. Cash projects can provide large sums of money to recipients that are not so common in the local area, for instance, one respondent told about a project that provided 120 US Dollars, which is almost 5,500 Sudanese Pounds. Recipients would have to walk around with a bag full of notes, which is very visible and you can be exposed to risks, so people did not feel comfortable. They solved this issue by providing cards with money on them (respondent 7<sup>109</sup>). Logically, one might think that cards can also be stolen, but this risk has already been tackled. With e-cash, at least in the way that some organisations organise their intervention, it is impossible to use a stolen card because there are photographs, signatures and passwords that prevent a non-owner from making withdrawals, so that also provides a bit of safety (respondent 12<sup>110</sup>). In the end, the safety that digital cash programmes can provide to both recipients and NGO staff, is too big to ignore and push aside.

A second benefit is that technology makes it easier to reach the recipients. According to some respondents, using digital money makes it easier to reach people that could be more difficult to reach with physical aid. The idea is that when distributing goods, or even cash in envelopes, people have to come to a central point to collect their items, whereas when NGOs do things digitally, people can decide when and where they go, and what they purchase. There even is the option that if several people live really remotely, agencies organise a kind of farmers market where the local vendors that they contracted go to those areas, so the organisations remove the burden that the recipients have to make the journey to a large urban area. Organisations bring the vendors to the people, which is impossible to do with in-kind aid,

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because that would cost too much money and is too difficult. So, in the end, if NGOs do it correctly, they can reach more people with digital cash than with a programme that is designed to distribute goods (respondents 2<sup>111</sup> & 8<sup>112</sup>). But is this what organisations do? Other respondents said that the use of technology could potentially exclude exactly those who live remotely, as mentioned in the previous section. It is possible to have an inclusive programme with cash component without technology, and it is also possible to have a very exclusive programme with mobile money. But, this is a factor of design, inclusiveness derives from the strategy organisations adopted, which is independent of their distribution mechanism (respondent 12<sup>113</sup>).

*“The tool itself is not magically going to come up with the names of people that should be included or not.” – Respondent 21<sup>114</sup>*

First, organisations decide who they want to include in their programme, and then they will look into the digital technologies that can be used (respondent 17<sup>115</sup>). So in the end, it comes down to cost- efficiency again: if the use of digital technologies reduces the costs, a lot of funds are released that can then be used to increase the scale of the programme.

The use of digital technologies can ensure that the right people are being selected within a community, but the human factor in this is still large. Technology does not take over the selection process, at least not yet. The use of digital technologies can help with the delivery, but not with the registration. Whatever data is being collected, only the mode of collection has changed, NGOs have merely shifted from paper to electronics, but the scoring system is still the same, so in the end the same people appear on top of the list (respondent 14<sup>116</sup>). Where technologies *do* help organisations, is by raising flags, such as showing duplications. Technology helps highlight the areas that you need to focus on, instead of having to focus on everything (respondent 21<sup>117</sup>). Then again, another respondent has said that by using digital

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<sup>116</sup> Field Office, Male, Global South

<sup>117</sup> HQ, Male, Global South

technologies it is actually more difficult to include marginalised groups, as they are more often (digitally) illiterate and thus not included in a programme that uses digital technologies. However, having a system that can create its own identities means NGOs can include those people without official/national identification records that could otherwise potentially be wrongfully excluded (respondents 13<sup>118</sup> & 21<sup>119</sup>). Technology thus has the potential to be more accurate in the selection process, but those selected also have to be comfortable with and able to use technology, something that should not be forgotten.

Lastly, digital technologies provide the opportunity to inform people currently not included in the digital world about technology (respondents 15<sup>120</sup>, 20<sup>121</sup> & 21<sup>122</sup>). For instance, when an organisation, as part of the intervention, is creating official identities for the people affected, they can keep those records and use them, so in the future they can be eligible for loans and other things, when they can show that they are able to handle money and to handle an account. It enhances the financial inclusion of the people affected (respondent 21<sup>123</sup>). An organisation can see the humanitarian intervention as a window of opportunity to educate the people affected about digital technologies, because this would help vulnerable households to become more resilient. By not engaging with technology, organisations could create a risk to households that they continue to spiral down this non-digital road whereas the rest of the world is increasing its connectedness.

*“There is no denying that internet and e-transfers are the direction of the future, I don’t think anyone sees a future where we go back to a paper-based system.” – Respondent 15<sup>124</sup>*

The inability of recipients to use technology can thus not be seen as a risk that should lead to abandonment of the technological component, but as an opportunity to include the recipients in the digital age, by educating them about the technology at hand.

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<sup>118</sup> Field Office, Male, Global South

<sup>119</sup> HQ, Male, Global North

<sup>120</sup> HQ, Female, Global North

<sup>121</sup> HQ, Male, Global North

<sup>122</sup> HQ, Male, Global North

<sup>123</sup> HQ, Male, Global North

<sup>124</sup> HQ, Female, Global North

With the exception here and there, aid workers see a future for digital technologies in humanitarian cash programmes, depending on whether or not certain conditions are met before implementation. Apart from one, all respondents said that the recipient should be at the center of the project, so if recipients do not wish to receive digital cash, then it should not be used. The respondents do all see possibilities for cash and the use of technologies, but are careful to say that it would solve big problems. As mentioned in previous chapters, cash is a modality. It is only a part of the programme, and not the programme itself. Then, a lot of conditions need to be fulfilled before cash can even be considered as a modality, such as functioning markets. The same goes for digital technologies. It is promising, but aid workers warn to be careful and look at whether and how technology can actually improve a programme and to not use technology just for the sake of it. But digital cash transfers have certain benefits, such as increased safety, and where possible and desired by recipients, DCTs can certainly be an improvement in the provision of humanitarian aid according to the respondents.

### 6.3 Conclusion

In this chapter I discussed the risks and benefits associated with the digitalisation of humanitarian aid. The risks at hand are a concern, and NGOs need to make sure that they have tackled these risks *before* they implement a programme with a technology component. However, NGOs aren't bad organisations, they do not set out to intentionally harm the recipients. Yes, these risks are very serious, but from what I have gathered from the respondents their organisations are also working very hard on making sure these risks are mitigated. Likewise, technology is not necessarily a problem either. There are many benefits to technology, of which especially safety should not be taken lightly. The improvements on accuracy and the ability to reach more people are also important advances. However, though aid workers might conclude that the benefits outweigh the risks, it is the recipients that carry the majority of the risks, not the aid workers. I would therefore conclude that technology should be used only if the recipient also accepts the accompanied risks.

## 7. Discussion and Conclusion

In this chapter I will answer the main research question: “How do aid workers see the future of digital cash transfers in humanitarian programming?”. The introduction of digital technologies in the humanitarian field has made NGOs look at how they can use them in their programming. To answer the main question, I had developed sub-questions. Analysing the answers provided by the respondents, I conclude that use of digital cash transfers can contribute to optimising the aid distribution component of a humanitarian intervention. By handing out cash instead of in-kind goods, NGOs are empowering the recipients and providing them with more dignity. Cash also has the ability to stimulate the local economy instead of jeopardizing it. Technology in addition brings safety to the table. It can also help in reducing misappropriation and fraud, as well as provide a cheaper and faster response. Though it is indeed true that donors have a significant influence on NGOs and their programming, their power is not almighty, nor do they necessarily want other things than the NGOs themselves. Moreover, I conclude that the organisations themselves always have the final say on whether or not they want to implement a programme with a digital cash component. I conclude the same for the Dutch Relief Alliance as a donor. Nevertheless, though donors or overarching organisations may not be puppeteers, they do provide huge incentives for organisations to innovate.

I have looked at the risks and benefits associated with digital cash transfers. I conclude that there are indeed risks involved, such as concerns about data protection and acceptance within the communities. However, there are risks involved with any modality. This is not to say that we should simply accept the risks that technology brings then, more that aid workers acknowledge their existence and are working hard on mitigating the risks in the best ways possible. The benefits that technology brings, are the reasons why aid workers want to move forwards with it. The safety component is the most important aspect that technology brings to the table, but the opportunity to include recipients in the digital age is also significant. To bring it all back to the research relevance: who really benefits from the use of digital cash transfers in humanitarian programming? It is both: organisations, as well as recipients.

However, even though aid workers see a bright future for the use of digital cash transfers in humanitarian programming, according to the respondents and the scholars, neither

technology, nor cash, are the whole story. They are only part of the story. A programme that consists solely of transferring money from the organisation to the recipient and then leave it at that, will never be a good programme. Cash alone, digitally transferred or not, is not enough, it is not a programme in itself, it is merely a modality. Digital cash programmes have the potential ability to reduce a households' vulnerability, but it is not enough, and strategies that increase social inclusion and empowerment need to be incorporated in the programmes too. NGOs provide much more than digital cash transfers. In the first place, the humanitarian agencies are responsible for targeting the appropriate households. Very often, governments in crises-hit countries do not have all the citizens' data, and the local leaders could be biased towards certain social groups, so NGOs cannot fully rely on them to select the recipients. It is also beneficial if an organisation has people on the ground who can explain to the people affected how the targeting criteria come about, and why some people are included in the programme and others not. Especially in places with low literacy levels, one need people on the ground who can support the recipients, who can explain how much money they have, how to manage that and what they can do with it. Then, there will also always be disabled people amongst the affected population, who cannot simply walk to a store and spend the money, so organisations need contingency measures for that. (Post-distribution) monitoring is also an important part of the programme, where the people affected can share how they feel about the programme and what they think should improve. Cash nor technology can replace such programme requirements. In a humanitarian intervention, cash is never a stand-alone modality. Organisations are dealing with heavily traumatized people, who need additional help that cash cannot provide, such as psychological support. Moreover, protection is an important aspect of the programme that cannot simply be removed. Without protection, recipients receive cash but are suddenly unsafe because of that. By removing the people on the ground, security risks such as abuse of the means would increase. It is therefore beneficial to have aid workers of the organisation visible, to keep an eye on these things and to whom recipients can turn to. If the cash is provided digitally, organisations need a team that is able to train the communities in how they can use these mobile phones or bank cards. In this case, the intervention is used as a means to prepare the communities for the future as well. This point was also made in the academic literature: stand-alone cash transfer programmes are unlikely to be effective and will probably create new problems. Actions to be taken when implementing a cash-based intervention could be strengthening the local financial system and

improving the roads. Digital cash transfers, like any other project, can have unintended consequences. Organisations and aid workers need to understand why these consequences occur, and for this they need people on the ground. How are organisations going to tackle these unintended consequences when they do not have people on the ground to monitor the project and thus detect them in the first place?

## 7.1 Future Research

When it comes to the risks associated with digital technologies, a massive concern was the storage of data. So much is unknown in this area, because even if organisations can guarantee that recipient's data are safe today with these employees and these systems in place and under these regimes, things change. No one knows what will happen to this data in five or ten years' time, and a limit of this study is that I cannot provide an answer to whether or not this risk is worth it. Solely recipients carry the burden of this risk, and not all might be willing to take it on in order to receive aid. But receiving aid means survival, so to what extent are recipients forced to accept this risk and to what extent do they think this is a problem? These questions need to be answered in further research that focuses on the recipients' side of this story. Likewise, I have made the claim that donors push NGOs to use cash and technology, and though donors want organisations to be careful with the implementation and to play by the rules, these are things I have heard from aid workers, I have not actually spoken to donors. There are two sides to every story, and in the search for donor influence on NGOs, the donors are not able to comment on the picture I have painted of their side. Such research on the recipients' and donors' side of the story will greatly benefit to the discussion of the digitalization of humanitarian aid.



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## Appendix A

### Interview Guide

Thank you for taking the time to allow me to ask my questions.

[Tell more about me and research]

Your response will be anonymous, I will not mention your name or your organization. Is it okay if I record this interview?

1. Can you tell me about your work for [organization]?
2. Can you tell me something about recent cash projects of your organization? (Can you illustrate your answer with an example?)
3. Was this unconditional cash aid, vouchers, cash for work? (Can you illustrate your answer with an example?)
4. In these projects, how is it decided who will be included, what is the targeting strategy?
5. What is the difference between this targeting strategy (for humanitarian aid) and targeting strategies for social protection programmes (where the most poor are targeted)?
6. Is this the general policy of your organization, or is it decided per case which targeting approach will be used?
7. Who has a say in this, is this decided solely by organization, or project members, or also others, e.g. donors? → which actors were involved in deciding on who will be eligible to be recipients in the programme?
8. What can you say about power differences involved in the decision-making processes?

9. Do you have evaluations afterwards to see if errors were made (false positives/negatives?)
10. If so, how do they work?
11. If not, why not?
12. Has your organization also made use of technology in cash projects? (Can you illustrate your answer with an example?)
13. Why yes, why not?
14. Has your organization made use of technology in non-cash projects?
15. Perhaps if yes elsewhere but not cash: why there but not ctp?
16. Why has the decision been made to use technology?
17. Who has been involved in making this decision?
18. Do you see a difference in terms of inclusiveness when technology is used versus when it is not used? (Can you illustrate your answer with an example?)
19. Do you think this difference can be (solely) attributed to technology, i.e. would there be less people (correctly) included had technology not been used? (Can you illustrate your answer with an example?)
20. When using technology, what are the risks that your organization sees? → what have you found to be risks that accompany the technology that would have been avoided otherwise? (Can you illustrate your answer with an example?)

21. What are the risks when you do not use technology? → have you found that not using technology could lead to risks that could be avoided with use of technology? (Can you illustrate your answer with an example?)

22. The benefits stemming from technology use, do you see that they lead to more people receiving aid, or do you see more (positive) effects on the level of cost-effectiveness and efficiency? i.e. Is the use of tech beneficial for the affected peoples, or for the organization? (Can you illustrate your answer with an example?)

23. In your own opinion, do you think it is worth the risks to use technology? i.e. Are the risks of using technology worth the potential benefits? (Can you illustrate your answer with an example?)

Is there anything I haven't asked yet that you feel requires (more) explanation?

Do you have any suggestions for this research?

Is it possible to get into contact with someone from a local country office where such a programme has been implemented, whom I can ask to interview?

Do you have any other suggestions for possible interviewees?

Do you have any questions for me?

Thanks for taking time to talk to me.



## Appendix B

### Respondents

#	Function	Location	Sex	Origin
1	Programme Officer Disaster Management	HQ	Male	Global North
2	Humanitarian Programme Officer – Cash Technical advisor & Nutrition specialist	HQ	Male	Global North
3	Manager of Programme Quality	Field Office	Male	Global North
4	Junior Protection Officer	HQ	Female	Global North
5	Cash Advisor	Field Office	Female	Global South
6	Program Specialist Disaster Management Unit	HQ	Male	Global North
7	Global Cash Specialist	HQ	Female	Global North
8	Planning, Monitoring & Evaluation Coordinator	Field office	Male	Global South
9	Humanitarian Programme Manager	HQ	Female	Global North
10	Technical Co-lead	Field Office	Male	Global South
11	Humanitarian Programme Manager	HQ	Male	Global North
12	South Sudan Joint Response Program Manager	Field Office	Male	Global South
13	Technical Support & Quality Assurance Specialist	Field office	Male	Global South
14	Cash Advisor	Field office	Male	Global South
15	Cash Transfer Programming Lead	HQ	Female	Global North
16	Manager Business Development & Innovation	HQ	Male	Global North
17	Programme Officer	HQ	Female	Global North
18	Advisor Humanitarian Aid	HQ	Female	Global North
19	Programme Manager & Cash Advisor	HQ	Male	Global South
20	Disaster Response Coordinator	HQ	Male	Global North
21	Senior Officer Cash Transfer Programming Innovations	HQ	Male	Global North

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<b>22</b>	Co-founder	HQ/Field Office	Male	Global North
<b>23</b>	Youth Empowerment Delegate	Field office	Male	Global South

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