

An ethnographic study on mobile money attitudes, perceptions and usages in Cameroon, Congo DRC, Senegal and Zambia

FINAL REPORT



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Acronyms

AML	Anti Money Laundering
ASCL	African Studies Centre Leiden, interfaculty institute of Leiden University
BCC	Banque Centrale du Congo
BCEAO	Banque Centrale des Etats de l'Afrique de l'Ouest
BIAC	International Bank for Africa in the Congo
CDD	Customer Due Diligence
DFS	Digital Financial Service
DRC	Democratic Republic of Congo
ECOWAS	Economic Community of West African States
IFC	International Finance Corporation
KYC	Know Your Customer
LARTES-IFAN	Laboratoire de Recherche sur les Transformations Economiques et Sociales Institut Fondamental d'Afrique Noire Cheikh Anta Diop
MFI	Micro-finance Institution
MFS	Mobile Financial Service
MTO	Monetary Transfer Organization
MNO	Mobile Network Operator
mobile money	An emic term referring to the mobility of money
OTC	Over the counter
P2P	People-to-people
SAIPAR	Southern African Institute for Policy and Research

For an overview of DFS basic terminology, please see the guidelines produced by the Alliance for Financial Inclusion (AFI) in 2016: <http://www.afi-global.org/sites/default/files/publications/2016-08/Guideline%20Note-19%20DFS-Terminology.pdf>, accessed 21 March 2017.

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INTRODUCTION

This report marks the completion of a comparative ethnographic study into the usage, perceptions and attitudes towards digital financial services (DFS) in four selected countries—Cameroon, Democratic Republic of Congo (DRC), Senegal and Zambia. The results presented give a “voice” to users of DFS, giving insight into why people are motivated to use DFS and why they might not be using specific mobile phone-related monetary transfer systems. They also contextualize these motivations through a cultural understanding and reveal that the specific socio-economic and political contexts in which monetary transfer systems function play an important role in the decisions consumers make. Begun in September 2015, this one-year project was financed by the International Finance Corporation (IFC) as part of the MasterCard Foundation Partnership for Financial Inclusion. The research was conducted by the African Studies Centre Leiden (ASCL) in Leiden together with research teams in Cameroon, DRC, Senegal and Zambia.

1. Author's note

The choice of countries was partly determined by IFC, which provided a selection of eight countries, at least four of which had to be incorporated into the research. The main interest lay in finding out why the uptake of DFS in these countries was not as successful as it had been in Kenya, Uganda and Tanzania, for example. The ASCL's motivation for focusing on Cameroon, DRC, Senegal and Zambia was multi-fold. Firstly, the research team was intrigued by the anglo-francophone divide between the countries as well as their geographical locations within the African continent. While DRC and Zambia share a border, their respective histories and economic situation are very different. Initially, we felt that Zambia and Senegal would display similar patterns, in terms of their more established formal economies, when compared to Cameroon and DRC. As you will read later in this report, this did not turn out to be the case. Cameroon provided an interesting case study as it hosts both anglo- and francophone populations with their own specific histories. The trajectory of DFS uptake seems to be slightly more successful in francophone Cameroon,³ which informed our decision to focus on the anglophone region, Bamenda Grassfields (North West). Secondly, the ASCL has a vast knowledge network spanning many African countries, which we were able to engage. This project incorporated those research centres and researchers who have experience in ethnographic research and familiarity with the subject of communication technologies in general.

2. Executive summary

The following ethnography shows a complex interrelation between users, non-users and DFS, introducing a perspective that focuses on the importance of the social-political backgrounds of people in influencing trust in DFS. In the case study areas, the phenomenon of DFS was relatively new, calling for a certain caution when drawing larger conclusions. However, the way this technology was observed interacting with users and non-users alike, and in relation to ‘trust’, reveals the potential of DFS to change patterns of power, social relations and economics in communities and larger societies. Whether this is a positive development is for the users to decide. Our role is to reflect on the way this technology enters society and transforms it, for better or worse.

One of our main findings, and probably not a surprising one when dealing with more economic aspects of society, was that trust is a crucial and overarching theme. That said, trust is culturally specific and an historically embedded notion in a society, making it difficult to simply draw up a chart of trust relations and adoption of DFS (or lack thereof). In this report, we want to show this complexity by pinpointing themes that are crucial for understanding how DFS is appropriated, and where its introduction affects the economic, social and emotional performances of users and non-users.

The report has been organized into five chapters, beginning with a description of how the study was approached (ch. I). The following four chapters reflect the four key research questions: What

³ UNCDF/MM4P (2014) ‘Digital Financial Services in Cameroon’,
http://mm4p.uncdf.org/sites/default/files/Documents/cameroon_bn1_dfs.pdf.

makes up the infrastructure of DFS in SSA? (ch. II); How is the meaning of money changing in the context of digitalization? (chs. II & III); What are the factors informing people's perceptions and attitudes to DFS (ch. III); and what is the impact of DFS on financial inclusion? (ch. IV). Chapter V ends this report with some general suggestions on which policymakers and stakeholders can build.

In answering the key questions, six themes emerged from our ethnographic findings: In order to understand the society and ecosystem in which DFS is introduced, we need to look at the historical roots of monetary transactions (III.1) as well as at today's mobility of people and money, i.e. the reasons for moving money (III.2). This provides a context with which to interpret peoples' perceptions of DFS' technological (III.3) and regulatory aspects (III.4). The stories informants told within the framework of the above necessitated adding another layer of analysis, which examines the reasons people feel they do or do not 'belong' to such new technologies as DFS (III.5) and in how far economic hierarchies play a role in this and are, in turn, affected by them (III.6).

These six themes are not intended to be proscriptive. Indeed, due to the interrelated complexity of these themes and culturally-specific motivations around DFS, this report is not a toolkit, but rather a guideline that explores themes that influence, in different ways, the outcome of the introduction of DFS technology in a society. The themes are, therefore, not about understanding a lack of success per se, but about understanding and navigating the ecosystem discussed, in order to shed light on the motivations and frameworks for use as well as the challenges and obstacles to their uptake.

I. RESEARCH APPROACH

1. Conceptual reflections in an empirical study

The research we present in this report is of an empirical nature. The empirical goes beyond anecdotal evidence when framed by explicit theory and concepts. In this section of the report, we share some of our background ideas to the study. By allowing empirical data to inform the meaning of certain concepts, this report hopes to engage in a critical debate, one that is based on the perceptions of (non-)DFS users and that will touch on aspects of financial inclusion as well as social inclusion. Below we introduce the concepts central to this study.

1.1 Mobile money and (DFS)

To be clear, the terms DFS and mobile money are different and therefore not interchangeable. DFS is general and refers to the full range of financial services accessed and delivered through digital channels,⁴ while the official term “mobile money” is defined as electronic money transferred via mobile networks and SIM-enabled devices.

During the research, however, we discovered that our informants use a multitude of terms to describe various digital financial services, but never DFS as such. To reflect this, we focus on the term “mobile money”, because it refers to the cultural and social characteristics of the societies we worked in and with.

Within the scope of this study, mobile money thus includes those DFS transactions made by mobile phone (electronic money transferred via mobile networks and SIM-enabled devices), via mobile banking (e-money saved or transferred through an account provided by a bank or MNO) and through money transfers such as those provided by MTOs. It also, however, allows for a broader incorporation of money as something “mobile”—it refers to the physical mobility of money itself, namely money flows.

As a part of our approach, we focused on this aspect of “mobility” inherent to dealings with money as they are related to the mobility of people, economies and society. The concept “mobile money” allowed us to dig deeper into the background stories behind the need to “move” money over distances, leading us to the various methods of doing so (not limited to DFS), and relating it to the cultural practices of mobility and immobility, including the networked economies that characterize the region.

In short, “mobile money” as an empirical concept is a play on words—“mobile” refers to the physical movement of money, but also to the technological methods involved and to the digital abstraction that is money.

1.2 The mobile money ecosystem

The mobile money ecosystem⁵ refers to the interrelationship between all elements that have to do with the mobility of money—the communication infrastructure, the regulatory framework formulated by the national and supranational institutions, the DFS themselves as well as their potential users and

⁴ We refer here to the definition as stated in the latest G20 Principles issued by the Global Partnership on Financial Inclusion, “The term “digital financial services” covers financial products and services, including payments, transfers, savings, credit, insurance, securities, financial planning and account statements. They are delivered via digital/electronic technology such as e-money (initiated either online or on a mobile phone), payment cards and regular bank accounts”. ‘G20 High-Level Principles for Digital Financial Inclusion’, 2016 GPF Report, p. 3.

⁵ Cf. ecology or ecosystem approaches in communication studies: Horst, H. & D. Miller (2006) *The Cell Phone: An Anthropology of Communication*. Oxford/New York: Berg Publishers; Altheide, D.L. (1994) ‘An Ecosystem of Communication: Toward a mapping of the Effective environment’, *Sociological Quarterly* 35(4):665-683.

non-users. Here, we follow the biological interpretation of ecosystem, in which all elements of nature and humans are interrelated. Hence, a saleswoman in the Bamenda market selling her potatoes for 100 FCFA (\$ 0.165) does not operate in isolation. Her economic transaction is related to (1) money; (2) potatoes that have value; (3) the buyer; (4) the earnings of the buyer; and (5) the banks where salary of the buyer is deposited. An ecosystem can thus consist of several of these circuits, which may function in parallel, but which are also connected somewhere. These ecosystems have a history, and they receive meaning from the participants/meaning-givers, who are part of it. Digital financial services have arrived within existing ecosystems, but, at the same time, have created their own space within the ecosystem. Staying with the example of the Bamenda potato seller: the introduction of DFS can mean that the economic transaction chain builds on what already exists and has also come to include (6) the DFS provider that the market woman decides to use to save the earnings from the potatoes she has sold; (7) the DFS agent that she visits to deposit cash in return for e-money in her account, and so on. These ecosystems are not closed, static systems, but rather are constantly in flux due to changes in the elements from which they are formed—the DFS providers available, the choice and circumstances of the user. For the purpose of this research project, limits were set—national boundaries play a role in determining rules and regulations concerning DFS, and also help in framing their political and historical contexts. The mobile communities and networks that use DFS most frequently were also identified as informing the parameters of the mobile money ecosystem. The economic aspects of DFS and their organization are bound to both these spaces. Hence, the teams examined the mobile money ecosystem both in its national political environment and in the networks and mobilities in which it operates.

1.3 Financial inclusion and alternative financial systems

Another main concept referred to is that of financial inclusion. According to the World Bank's definition, "Financial inclusion means that individuals and businesses have access to useful and affordable financial products and services that meet their needs—transactions, payments, savings, credit and insurance—delivered in a responsible and sustainable way." In this sense, access to a transaction account (like those provided by DFS) is a first step towards broader financial inclusion, since it allows people to store money and send and receive payments. Financial inclusion thus entails a level of formality.

In the case study areas, empirical data shows that several financial systems function in parallel and are often interlinked. People are usually part of some kind of (financial) community within which they exchange or save money and capital—making use of both formal and informal methods. One example can be found in the popular micro-credit schemes *njangi* or *tontine*.⁶ These informal financial channels create a *feeling* of being financially and socially included.

Our approach to financial inclusion thus entails an attempt to understand an economy that includes these various financial systems (formal and informal). Such an approach should give a more complete picture of inclusion in general, touching upon social and economic in/exclusion when searching for the factors informing people's perceptions and attitudes to mobile money, as defined above, and their DFS.

NB: This report focuses on financial inclusion in general. For a definition of digital financial inclusion, please refer to the definition given in a recent G20 report.⁷

⁶ *Njangis* (anglophone Cameroon) and *tontines* (francophone Senegal) are rotating credit societies to which its members contribute money—often a set amount at a set frequency. They are used for savings and to provide credit. Members take turns in receiving the *tontine* or *njangi*'s full, or an alternative fixed, amount. These credit societies come in various shapes and sizes and will be talked about in more detail in section II of the report.

⁷ "Digital financial inclusion" is an evolving phenomenon. The principles rely on the explanation in the 2016 Global Partnership for Financial Inclusion (GPFI) report on Global Standard-Setting Bodies Financial Inclusion: The

2. The relation between the concepts: Theoretical steps

Central to this study is the question of whether and how mobile money, and its accompanying DFS will allow for a further financial inclusion of people in global economies. This question becomes even more complicated in a context where, historically, informal economies and economic inequalities have been inherent to a daily practice that, at times, does and, at times, does not include the mobility of money. In this research, we therefore aim to understand what (digital) financial inclusion means in different African contexts and in relation to cultural and social factors. We do so by analyzing people's perceptions of these technologies. Below we have outlined the main theoretical ideas that guide this ethnographic study.

2.1. Economy and digitalization: An anthropological approach to mobile money

The study of mobile money can be approached through theories in economic and digital anthropology. We consider economy as a set of economic relations that are culturally and socially embedded, and which are an intertwinement of informal and formal economies. In addition, we posit that such technologies as those provided by DFS are not neutral “tools”.⁸ Essential to this, and an important reason for choosing an ethnographic study, is to gain insight into what the roles of culture and sociology are (vis-a-vis mobile money). In a sense, all technologies embody social and cultural factors, which play a role in the way the technology is accepted (and thus appropriated). These social and cultural factors include, amongst others, power and access—i.e. the political economy surrounding money and (mobile) banking.

Digital anthropology (as explained by Horst & Miller 2012)⁹ starts with the introduction of money. Money is seen as an abstraction of social and economic life, in the sense that a metal object (coin) or a piece of specially printed paper (a dollar bill) is given a non-material value. The evolution from material goods/services to shells/beads, gold and paper money has continued and now reached an added layer of abstraction, namely the digital existence and transfer of money. In this sense, DFS can be seen as a form of *digitalization*. How, then, does this interfere with (pre-)existing cultural and social notions of wealth, value and market relations, in a formal and informal economic setting? In other words, does the fact that money can be transferred digitally (through a mobile phone) influence existing modes of access to wealth? Does it alter power relations or impact the types of populations that can now appropriate this new way of sending money to family members or business partners?

These points of interaction—power, access and appropriation, and the digitalization of the environment and social life itself—are to be situated in an historical and socio-cultural context in which *mobility* and *connectivity* are central.¹⁰

Evolving Landscape (GPFI White Paper). It states: “‘Digital financial inclusion’ refers broadly to the use of digital financial services to advance financial inclusion. It involves the deployment of digital means to reach financially excluded and underserved populations with a range of formal financial services suited to their needs, delivered responsibly at a cost affordable to customers and sustainable for providers.” ‘G20 High-Level Principles for Digital Financial Inclusion’, 2016 GPFI Report, p. 3.

⁸ This approach is derived from the society and technology debate in which technology is seen as a non-neutral entity, one which is accessed and appropriated according to the rules of society. (cf. De Bruijn et al. 2009, *Mobile Phones in Africa: The New Talking Drums in Everyday Life*, Bamenda/Leiden: Langaa/ASCL).

⁹ Horst, H.A. & D. Miller, eds. (2012) *Digital Anthropology*, London/New York: Berg.

¹⁰ Cf. Latour, B. (2005) *Reassembling the social: An introduction to actor-network-theory*, Oxford: Oxford University Press; De Bruijn, M.E. & R.A. van Dijk (2012) Connecting and change in African societies: Examples of ‘ethnographies of linking’ in anthropology, *Anthropologica* 54(1): 45-59; De Bruijn, M.E. & R.A. van Dijk (2012) *The social life of connectivity in Africa*, Palgrave Macmillan: Basingstoke.

2.1.1 Mobility and connectivity: The importance of context

Economic transactions are closely linked to the norms and values of a society that are often framed in a historical process of change. In the case of African societies, much of the economic and social transactions that relate to mobile money are to be understood in a context of migrant and trader communities; that is to say, mobile people and market mobilities. How does the fact that we observe an abstraction of the concrete transfer of money (through DFS) relate to social and cultural encounters in mobile communities? To understand the present-day changes vis-a-vis the norms and values (i.e. attitudes and perceptions to DFS) we must include an historical perspective. The mobility of money is an old phenomenon and it is only when we take a time perspective that we can understand social change and the new “acceptance” of digital financial services.

By comparing variations (and connections!) between the four country cases of Senegal, Cameroon, DRC and Zambia, we will be able to ascertain more nuanced tendencies and stories vis-a-vis DFS and financial inclusion.

2.1.2 The mobile money ecosystem: Linkages and their chains

When studying issues related to money, we need to grasp what the perceptions of money are, how this money enters socio-economic networks and how it then moves through these networks. The term “mobile money ecosystem” is an adaption of the conceptual model “communication ecosystem”, which is used to analyze relationships between individuals, technologies of communication, social interactions and discourses within digital and physical environments.

In this study, we see money as a form of economic communication. Communication happens between points that usually make up a network. Within the context of ethnographic studies, these points are often defined as people (social actors/agents). We could say that a series of people who are connected through the communication that happens between them, form a series of linkages within a chain.¹¹ Although the linkages between these people are considered neutral in and of themselves, the chains that they then make up are not. These chains imply a certain hierarchy of linking. In the specific case of a monetary transfer of money (through such a chain), various actors can be identified from existing linkages exist—from the initial sender of the money (user), to the DFS agent, to perhaps the FSP involved in the transfer and even on to the formal bank or regulatory body that oversees all digital transactions. While each individual linkage (user - DFS agent / DFS agent - MNO / MNO - bank / bank - user) means little when examined in isolation, put into the context of the monetary transfer chain as a whole, they form a certain layered logic of society (based on specific political-economic and social contexts, as described above). Understanding the various chains that exist in terms of monetary transfers will allow us to sketch the mobile money ecosystem, i.e. the context in which monetary “communication” processes occur.

3. Research methodology

To decipher these logics and understand the transformations and changes as a consequence of the introduction of mobile money, we have applied an ethnographic method that allows for an understanding of processes and dynamics through the eyes of the (non-)users of DFS in eight study regions within four different national boundaries. The qualitative methodology, which included the mapping of relevant historical, economic and socio-political contexts, helps to explain the differences and similarities between the country cases. We chose to focus especially on the context of mobility—the mobility of money itself, but also the mobility of those transferring money (migration, commerce,

¹¹ This is an adaption and continuation of the social network perspective, which focuses on the nodes (linkages) and ties (chain) within a network, i.e. the exchange of information and the social ties that link them. (Cf. Castells 2000:397; Katz et al., 2004: 308). In the case of this project, the mobile money ecosystem forms such a social network. Examining the case studies from this perspective created a framework that included the different actors involved in mobile money, and thus helped create an understanding of the holistic context that shapes a mobile money ecosystem.

familial visits, etc.). In anglophone Cameroon, for example, a long history of mobility has informed the existence of many pre-digital financial services, influencing the contemporary choices for DFS-use by the majority of the population. The historical context within which the country cases are situated are equally important in understanding the acceptance of (new) DFS. Zambia has a history in mining and urbanization that has led to a strong formal economy. This is quite the opposite in Congo DRC, which has a long history of conflict and distrust of formal (banking) structures. The specific economic context of each country is another focus point and includes the different economic circuits/hierarchies found in society. Insight into these various contexts will allow for a more in-depth approach and critique of the development of DFS, their specific products and their (potential) users.

3.1 Overall research methodology: Ethnography and the mobile money ecosystem

All country cases followed the methodological framework outlined below, whereby each case study included an element of “mapping” and each study had a clear ethnographic approach to describing users involved in the mobile money chains.¹² Needless to say, the emphasis here is on the real users (consumers) of monetary transfer services and thus less on those providing the services (although they are included as informants). Ethnography revealed such things as perceptions, practices and attitudes to mobile money. Following actors (users and non-users) and their relation to mobile money services has given insight into the historical differences and current ecosystem in which mobile money transfers take place.

3.1.1 The role of mapping: Mobile money’s socio-economic ecosystem

By “mapping” we mean the method used to literally “map out” (compile an overview of) the various actors involved in the transfer of money and their interrelations—historically and currently (i.e. infrastructure of the ecosystem). Here, we were interested in finding out what makes up the infrastructure of digital financial services (DFS), not forgetting to include those transfer services that existed before the advent of mobile technology. In addition, an overview of the services offered was essential. The role of any regulations (governmental, fiscal, market, familial, etc.) influencing the establishment of and form that DFS take is crucial. In addition, the importance of informal/community services was not neglected. Such a (historical) map of the mobile money chain allowed us to situate the various users in terms of the choices they have at their disposal and of which DFS are most used—ultimately creating a focus for the ethnographic study of attitudes and perceptions. Methods used to create such an understanding of the mobile money ecosystem include observations, photos and interviews. Please note here that the focus of our research was not to paint a detailed picture of all the forms of DFS available, or of the exact regulatory framework to which they have to conform. We do, however, touch upon these subjects as they emerged from the stories shared by our informants.

3.1.2 The role of ethnography: Mobile money users as points of departure

Ethnography is a method that takes the duration of being in the field as its main qualification. A long interaction with the field enhances one’s knowledge and comprehension of social and cultural practices. The practice of ethnography consists of several methods: observation, participation, interviewing, conversation, ‘being’, keeping a logbook and diary, interacting and the famous “thick description”. The combination of the ethnographic method with qualitative surveys, visual methods and semi-structured interviews has brought a level of in-depth knowledge to the study. All case studies in this research are a combination of these methods.

Every ethnographic study needs a social starting point. Actors within various monetary transfer systems function as entry points into each country’s respective fields. The mapping exercise, introduced above, allows us to situate the various users within the complex ecosystem of monetary transfers. The maps sketch the context in which users act vis-a-vis monetary transfers and allow us

¹² The use of “chain” here refers to the set of relationships, interactions and linkages between the various actors involved in the transfer of money, i.e. from the individual user/consumer to the operator providing a service (individual or company), to other (regulatory/financial) institutions involved.

to understand their agency. The researchers followed various actors in their use of a variety of services. Furthermore, ethnography helped discover the regulations, both formal and informal, power differences (gender, age, social/political hierarchies), access and appropriation of technologies surrounding DFS users and non-users.

The observations of actors throughout different moments in the chain revealed specific layered cultural and social practices, as well as obstacles related to the transfer of money. Comparing these observations with previous historical practices by carrying out focus group discussions (FGDs) and interviews gave us a better understanding of today's practices. Visual methods were used to make short films and photo reports, combining the collection of data with a method of presenting/reporting findings. Throughout the fieldwork phases, written character sketches, "portraits" of DFS users and non-users were made. Several of these portraits will be found on the project's Webspace of "User Stories" (forthcoming).

3.1.3 Expected limitations and mitigation strategies

The two main challenges of this project lay in its called-for approach (ethnography) within a limited timeframe (one year), and the focus on four different countries. To address this, an effective research methodology was established, one that works from a specific analytical/theoretical framework, which joins the case studies and allows each one to start based on an empirical approach best-suited to the experience of the researchers themselves as well as the in-country situation. Holding a workshop early in the project (November 2015) functioned to align the team's research directions.

The challenge was also to balance and compare the different in-country case studies (urban-rural, differing socio-economic dynamics, etc.). The researchers followed the same methodology in all the chosen areas, while remaining flexible—adapting the research methods depending on the specific context. Where possible, they looked for comparable contexts (i.e. population density and level of entrepreneurial activity) in each setting. The case studies connected various geographical places and thus were not restricted to a localized study—the people from our case study areas, as well as the financial institutions or mobile phone companies involved, are, after all, not confined by place either. It is a challenge for this study to deal with this non-placiality (place-bound) use of mobile money, and instead include a strong spatiality (focus on spaces of interaction).

3.2. Methods and research team

Table 1: Overview of methods used

Method/Focus	Goal	Tools	Time frame
Exploration	Verify our knowledge of the research fields, i.e. landscape DFS, infrastructure, usage, etc.	Interviews, observation, Visual	Oct - Dec 2015
Mapping	Preliminary “map” of the relations between “actors” and the different products/services on offer	Map of the DFS network, interviews, observations	Oct - Dec 2015
Identification	Identification of the DFS products on which we will focus	Summarize and analyze, definition of selection criteria, case studies	Oct - Dec 2015
Market dynamics	Dynamics of the mobile phone and financial markets, financial inclusion as a process	Analysis of the data coming out of observations and DFS providers	Jan - April 2016
Usage	Social and economic use of mobile money and the services. Focus: network, gender, generation, used technologies, innovations, hierarchies, power relations, etc.	Ethnography, following informants, FGD, interviews, life histories, visuals	Jan - Aug 2016
Perceptions	Receptivity of the technologies and the products, amongst the population and advertising operators/DFS providers	Emic discourses, popular semiotics	Jan - Aug 2016
Historical context	Historical context of everything that is mobile money	Literature, interviews with actors, archives, life stories and accounts of actors	Jan - Aug 2016
Economic context	Including the “real” and “official” economies (formal, informal, illicit).	Literature, interviews with actors, archives, life stories and accounts of actors.	Jan - Aug 2016

The research team consisted of 20 field researchers, including assistants. This one-year project started in September 2015 and the research teams carried out 2-3 weeks of exploratory fieldwork in the months of October and November of that year. In early November, an Inception Workshop was held in Dakar in order to bring the team members together and align the research goals. A second workshop was held in July 2016 to discuss the research results and to present them to the IFC. In between, the

four teams carried out 7-8 months of fieldwork. As most researchers were local to their case study sites, they were immersed in the field throughout this time and also during the writing up of monthly fieldwork reports. Each team has made its own choices regarding the depth of the application of each of these methods, in particular in terms of the in-depth detailed ethnography. This was related to the experience and repertoires of the teams.

Due to the nature of ethnographic fieldwork, it is almost impossible to quantify the number of informants who contributed to this study. Table 2 provides an indication of the number of informants interviewed. Needless to say, there are many more whose stories have been collected through the more informal means of participant observation, daily chats and semi-structured interviews.

Table 2: Fieldwork Overview Oct 2015 - Aug 2016

	Cameroon	DRC	Senegal	Zambia
Team (incl assistants)	2 researchers	10 researchers	4 researchers	5 researchers
Case study areas	Baaba Village & Bamenda Town	Lubumbashi & Kinshasa	Louga & Dakar	Kitwe & Lusaka
Exploratory fieldwork	2 weeks	3 weeks	2 weeks	3 weeks
Fieldwork	8 months	8 months	7 months	7 months
No. of informants	over 120 interviews (Bamenda & Baaba)	48 interviews (Lubumbashi) 46 interviews (Kinshasa)	over 100 interviews (Dakar & Louga)	50 interviews (Lusaka) 60 interviews (Kitwe)
Background informants	students, <i>buyam sellam</i> , phone booth agents, journalists, bloggers, Okada or Bendskin Riders (motorbike taxi drivers), mobile phone company representatives, bank workers and users, MTO workers and users, college & secondary school teachers, accountants, mobile phone call box owners, call box operators, mobile money agents, local market women, taxi drivers	mobile money agents and tellers, mobile money users & non-users, small business (wo)men (formal & informal sector) students, merchants	workers, traders, money transfer service managers, jeweller, motorcycle taxi driver, Mutuel loan agents, PAMECAS agent, microcred agent, wari agent, joni agent, etc. pensioners, pupils, students, emigrants, teachers, trainers, craftsmen, bank security officer	mobile money tellers/agents, university students, lawyer, taxi drivers, bus drivers, gardener, maid, marketer, secretary, IT specialist, Business Development Manager, radio deejay, Front desk administrator, accountant, university lecturer, small-scale farmer, business entrepreneurs, retiree

3.2.1 The “field” and accessing informants

One entry point into identifying and selecting informants is service points and their personnel. These initial encounters with agents and users of various DFS during participant observation gave the teams a preliminary idea of DFS perceptions and possible obstacles to use. Especially the time spent in mobile money points/shops (i.e. DFS and other mobile money providers) revealed interesting interactions between users and agents, exposing expressions of satisfaction and dissatisfaction with the particular service. After the first period of fieldwork, the teams dove deeper into the field. In Zambia, the researchers included bus stations (namely bus drivers) as sites for finding informants. In Cameroon, the informal sector was approached in the form of motor taxi drivers, *buyam sellams*¹³ and business (wo)men. The team also spoke to several students, teachers, journalists, accountants and rural farmers. The Senegalese team focused on informants such as merchants, traders, market women and tradesmen, but also spoke to national and international migrants, including the family of these people back home. In Congo DRC, the team followed those working in the informal sector—market (wo)men, traders, merchants and land owners. They also concentrated on young adolescents, such as students. All teams identified people not using DFS amongst their informants.



Picture 1: Njoya Angel, a petty trader sharing her views on mobile money, Bamenda Town. Emmanuel Ngang

An important factor in the possibility to access informants was the socio-political climate and people’s distrust of the researchers in general. The Intermediary Fieldwork Reports and Webpace (access forthcoming), reflects on this aspect of “trust”.¹⁴ In most cases, the frequent visits to the field and returning to informants is seen as an important “method” for gaining trust and hence in-depth information. The Zambian team reported the following:

Follow-up interviews were conducted in February, causing participants to become more comfortable with sharing information and disclosing their views on DFS. During March and April, semi-structured in-depth interviews with selected users and non-users of mobile money services were used to construct portraits of informant’s history and perceptions of money, banking services and mobile financial

¹³ *Buyam sellams* are people who buy food stuffs—cocoyam, beans, cassava, and fruits—from the hinterlands and retail in urban centres. Sometimes, *buyam sellams* only supply to other retailers in urban markets.

¹⁴ Important to note here are the different connotations/levels that “trust” embodies throughout this research. Trust in the context of researcher-informant relations is a different kind of trust than the one we refer to when discussing informants’ perceptions of financial institutions or even when discussing trust in relation to social networks.

services in Zambia. In May, a focus group discussion was held with five participants (comprising youths aged 20-34 years) in Lusaka and five (aged 31-54 years) in Kitwe. The interaction between users and non-users of DFS caused an interesting group dynamic, as tellers tried to convince non-users to start using DFS.

Photo/video material was also used to capture the mobile money market. Some agents and tellers were willing to have pictures of their booths captured; however, most of the study informants were reluctant to have pictures of their faces taken. Informants expressed concern about how the pictures and information captured from interviews would be used, especially if they would be shared on the internet. During in-depth interviews for portraits, some informants asked that only their first name be used in reports, so that they could not be publicly identified. Furthermore, three months into the research, three different tellers operating in Lusaka shared with the researcher that they had not been truthful in their earlier interviews. They revealed that they had been worried that there was a hidden agenda behind the research, and were hesitant to discuss the negative aspects of DFS for fear that their employers would find out and terminate their employment.—Team Zambia’s contribution to a Methodological Reflection on the Webspaces (forthcoming)

These observations reflect those of the other three country teams, excerpted below. Their stories are also published on the project’s Webspaces.

Visiting DFS—such as those provided by mobile phone companies—to observe, was challenging. Firstly, workers in these institutions wanted to know the reason why we were sitting for a long time in their office, without conducting a transaction. When “many eyes” were focused or raised towards us, we pretended to read adverts. Sometimes, we politely told the staff that we were interested in knowing how to register for mobile money, its functions and the related services/advantages when one becomes a user of mobile money. This actually paid-off.—Team Cameroon’s contribution to a Methodological Reflection on the Webspaces (forthcoming)

The Cameroonian team members are familiar with and to their fieldwork areas. Both are from the Bamenda Grassfields themselves, and both have concentrated their professional careers on subjects within the region. One of the researchers was involved in an earlier study (finalized in 2014) on mobile money, carried out with Langa for the Institute for Money, Technology & Financial Inclusion (IMTFI). In addition, both researchers are familiar with doing ethnographic fieldwork, including gathering visual materials.



Picture 2: Focus Group held amongst a group of saleswomen (*vendeuse de feuilles de lianes*), Kinshasa. Philippe_Matsundi

The Congo DRC team also has a lot expertise in ethnographic fieldwork and research on the informal sector and micro-credit schemes. While both researchers are from DRC themselves, and despite the fact that they worked with local research assistants, the climate in DRC is such that people were initially more reluctant to speak out.

In the interviews we conducted, the difficulties encountered were mainly linked to the mistrust on the part of the people working for mobile phone operators, the companies that provide mobile financial services (MFS). Our research assistants were often suspected of being agents working for their competitors. Some of them had problems understanding that this was a qualitative and not quantitative survey, and that we needed to hold interviews. So, when we were trying to get an interview, sometimes we were asked to leave a questionnaire that would be completed, and which we could subsequently recover. More specifically, for the survey with banks, we encountered the same difficulty that we encountered among mobile telephone operators. The people we contacted at these banks were often not willing to give an interview, limiting themselves to providing surveyors with brochures or official documents.—Team DRC’s contribution to a Methodological Reflection on the Webspaces (forthcoming)

Agents were worried the researchers had come to ‘spy’ on them, having been sent by their own provider or by a competitor. The issue of money is a sensitive one and informants, too, were not initially comfortable with being spoken to.

3.2.2 Additional sources of information

In most sociological research we rely especially on what we have labelled “methods” of research that elicit “clear” data. In the ethnographic method, however, there is room for informal encounters and “chats”. The researcher makes a report about what he or she encounters and sees during the research and considers this data. The interpretation of these “observations” often guides the researcher’s choice of who to interview and who to follow. Here, we are clearly entering the domain of subjectivity and interpretation by the researcher. Detailed reports are therefore needed to rectify/justify choices—the subjective is part of our research method.

After a rapport was established within their respective field sites, Focus Group Discussions (FGD) were organized and more detailed “portraits” of (non-)users compiled in order to understand perceptions of DFS within their specific contexts. These FGDs were held halfway through and/or at the end of the fieldwork periods. Each team organized at least one FGD, depending on their specific approach and resources. The FGDs were a research tool, but, at the same time, a moment for sharing the research with stakeholders and to inform participants about the possibilities of DFS. As the Zambia Team reported, at the end of the FGD, the non-users and users, who had been hesitant/distrustful of certain services, had become more positive about DFS usage due to the information they were provided with by others in the FGD. Table 3 gives an overview of the FGDs held by the country teams.

Film, photo and the development of personal stories (portraits)¹⁵ are both a result of and an aid to getting involved with (non-)user stories. Visuals and gathering personal stories are complementary resources to this research, acting as *tools* for research while, at the same time, providing data *results*. The portraits compiled have been given special attention in our Webspaces, an online platform that functions as a complementary archive to this report (forthcoming).¹⁶ Sharing (the making of) visuals and stories with informants helps dissolve the boundaries between researchers and informant, allowing trust to build more easily. These intimate encounters also helped to understand the more emotional side of the changes that people encountered with the introduction of DFS in their

¹⁵ NB: The portraits consist of written character sketches and are not necessarily accompanied by photographs.

¹⁶ The proposed project is an innovative attempt to bring together anthropologists, young (African) research talent and key players in the industry. The Webspaces is a platform for members of the team to share aspects of their research and present the more remarkable findings. A selection has been made of our research teams’ observations on the most pertinent themes needed to understand DFS and financial inclusion.

environment. Not all teams were successful in gathering visual material. The Cameroonian team was able to do the most in terms of taking pictures and recording film. Despite DRC's team encountering difficulties in relation to a distrust of photography in the public realm, they were eventually able to capture a few street shots in places where people did not figure prominently. In Zambia, too, people asked not to have their faces visible in the shot and worried about how the pictures would be used.

Table 3: Overview of FGD per country

	Cameroon	DRC	Senegal	Zambia
Focus Group Discussions	1	7	3	2
No. of participants FGD 1 (DRC: FGD 1 & 2 combined)	Bamenda: 12 participants	Kinshasa: 16 & 13 participants	8 participants	Lusaka: 5 participants
Background of participants FGD 1 (DRC: FGD 1 & 2 combined)	Express Union Sales Manager, Mobile Money Agent Bamenda, Branch Manager Afriland Bank, MTN Mobile Money Cameroon, Orange Money Cameroon, Mobile Money Agent, Manager Bayelle Credit Union (MF0), Mobile Money Sales Agent, Baaba Ndop, Blogger/ Journalist/ MM user	M-Pesa and Tigo Cash users, M-Pesa user, M-Pesa users and small business owners, M-Pesa and Airtel Money user, Tigo Cash user, provider of small mobile banking shop, Airtel Money user and old provider of Pepele Mobile, Orange Money user and agent, non-users, Pepele Mobile user, Airtel Money shop agent, provider of numerous mobile banking services, Jeton cash users, old user of M-Pesa	Teachers, trainers, artisans, (formal sector users),	university students, mobile talktime vendor, mobile money teller, non-users
No. of participants FGD 3 (DRC: FGD 3, 4 & 5 combined)	n/a	Kinshasa: 13, 15 & 17 participants	5 participants	Kitwe: 5 participants

Table 3: Overview of FGD per country

Background of participants FGD 2 (DRC: FGD 3, 4 & 5 combined)	n/a	M-Pesa users, Pepele Mobile and Tigo Cash user, Tigo Cash user and small business owner, non-users, Tigo Cash and Orange Money user, M-Pesa and Tigo Cash user, old M-Pesa users, Pepele Mobile user and agent, old Tigo Cash user, Airtel Money user	Money Transfer Service Managers (Agent Orange Money, Tigo Cash Agent, etc.), former TM Service Manager	Lecturer, accountant, bus driver, entrepreneur, mobile money agent/super dealer
No. of participants FGD 3 (DRC: FGD 6 & 7 combined)	n/a	Lubumbashi: 10 & 11 participants	6 participants	n/a
Background of participants FGD 3 (DRC: FGD 6 & 7 combined)	n/a	M-Pesa agent and users, call box owners (Airtel, Orange, VDC) and user of M-Pesa & Airtel Money, Vodacom shop owner, Airtel Money agents and users, non-users, old Airtel Money user	Metal welder, driver, student, carpenter, tailor, merchant (informal sector)	n/a

At the same time, the research teams made use of secondary sources (including private and national archival material in the case of Cameroon) to complement their knowledge of the socio-economic context of mobile money. In Zambia and Senegal, there was a higher number of studies and secondary sources on DFS providers to access than in DRC and Cameroon. In DRC and, to a certain extent, in Cameroon, DFS are a very recent phenomena.

The project also involved the compilation of a literature overview. This was carried out by Gerard Bruijnhorst of the ASCL library. The aim was to get an idea of what has been written in relation to mobile money, DFS and financial inclusion in general and in relation to aspects of social and economic change. The choice was made to concentrate on academic studies published after 2013. The literature review will be incorporated into the team's forthcoming special issue/academic publication.

4. Introduction to the case studies

Each of the four country teams chose two geographical locations in which to set up their case studies. These locations vary, from a capital city, large peri-urban areas, a rural city/town, to being geographically close to each other or at a great distance. Whatever their specific contexts and traits, they make up a regional mobile money chain and, in turn, inform our understanding of the national

mobile money ecosystem. The variety of the studies allowed us to grasp the dynamics in relation to the similarities and differences of mobile money ecosystems in Africa. The intended comparison between different cities and their hinterland¹⁷ was not very promising, as they were rather similar or at a certain phase of acceptance of mobile money. Hence, our original plan to compare within case countries did not turn out to be fruitful. By contrast, the comparison between the countries was—especially in relation to the analytical themes identified. The case studies within the countries mostly allowed us to understand different stages within the introduction of mobile money and to encompass various mobile communities and networks.

4.1 Cameroon: Bamenda Town & Baaba Village

Cameroon is a middle-income country situated in Central Africa. The country is divided into two areas: anglophone and francophone Cameroon. Our study is situated in the anglophone part of the country, namely in the Bamenda Grassfields of North West Cameroon. Before detailing the Baaba and Bamenda example, it is important to say here that from the early times of colonialism the region was transformed into a plantation economy. Both Bamenda and Baaba were regions that served as a labour reservoir for these plantations, and hence a mobility pattern linked to this economy coloured the region and the cultural and social life of people. Mobility for the plantations has been transformed into new mobilities, with people moving to and having ties with Europe and other African countries. Indeed, mobility is an integral part of the economy of this part of Cameroon.

Both the case study sites, namely Baaba Village and Bamenda Town, are located in the Bamenda Grassfields of North West Cameroon. Baaba is a chiefdom of about 40,000 people in the plains of Ndop, about 40 kilometres from Bamenda. It is also the name of a rural village. The Grassfields are divided into traditional chiefdoms that include a hierarchy between people, and at the same time have an autonomy. The Baaba people form an ethnic group with their own language and their own rituals and customs. From Baaba, many people migrated to Douala and to Bamenda, forming a network society, or, if you will, a mobile community. At the moment of writing, there is no DFS agent or other money transfer agency (MTO) operating in Baaba town. It does have mobile network coverage in the form of three providers. Baaba is an interesting case in combination with Bamenda as it shows the chain of money flows. Despite the fact that there are no DFS agents, the town is profiting from their existence and is indeed englobed in the chain of mobile money transfers. At the same time, it is a place where mobile money is still an expectation.

Bamenda is a cosmopolitan town with a population of about 250,000¹⁸ people. It has a history of a continuous influx of people from various parts of the region. Bamenda is often characterized as a self-made town: about 85 per cent of Bamenda Town dwellers are farmers and traders, with a small proportion of the population working for government services. Coupled with the absence of industries, the unemployment rate¹⁹ is very high, and graduate youths and college leavers have resorted to trading in second-hand clothes, amongst other things. Despite this, recent indicators show that Bamenda is becoming an economically fast-growing town. Proof of this can be found in the many banks, established in economically central cities like Douala and Yaounde, which have operating branches in Bamenda. Inhabitants are mostly involved in the informal sector—such as motor taxi drivers and market women—as government taxation policy seems to discourage private incentives.

¹⁷ “Hinterland” indicates those places (and spaces) that exist through linkages with urban settings. For example, urban cities do not function as isolated units; instead, a larger area feeds and is fed by the socio-economic life taking place in their centres.

¹⁸ Figures on the number of inhabitants of Bamenda are diverse and vary from 200,000 to 500,000.

¹⁹ The unemployment rate referred to is in relation to ‘official’ employment. A large section of the population actively earns income in ‘unofficial’ ways.

The economic growth of Bamenda also depends on Micro-Finance Institutions (MFIs) like the Credit Union League and MTOs like Western Union, Money Gram, Express Exchange, Express Union, etc. The growth of these organizations is linked to the increased rates of remittances sent home by “bush fallers”, a term used locally to describe individuals who have gone abroad in search of economic opportunities. One informant describes how the lack of job opportunities has forced many families in Bamenda to “[d]o everything possible so that a family member ‘fall bush.’”²⁰ With such high rates of migration, remittances from abroad have become a crucial and dependable financial source for families in Bamenda.

Despite its economic growth and ‘modernization’ of the economy, Bamenda’s social structure is based on ethnic relations. It is interesting that such ethnic networks, which extend into the villages (such as Baaba), are also the basis of certain trust-related exchanges. These are, in a monetary sense, the examples of *tontines* and *njangis* that we will introduce later (section II). Cameroon is special in this regard. These are social lending/saving groups that precede the mobile money transfers and, at the same time, they are one of the factors in the slow adoption of the new forms of mobile money.

4.2 Congo DRC: Lubumbashi & Kinshasa

Research was conducted in and around both Lubumbashi and Kinshasa. The extremely clear economic differences between Kinshasa and Lubumbashi provided us with a research field covering the informal and poverty economy of Kinshasa, and the middle-income city and economic capital of Lubumbashi. We expected to find significant variations in the perceptions and attitudes of the local population of both cities, linked to important economic differences. We were especially interested in understanding the influence of the informal economy on the use of DFS. The research results, however, did not indicate much of a difference between Kinshasa and Lubumbashi.

Kinshasa has a population of 10 million and a large informal economy. Lubumbashi is the second major town, with 2 million inhabitants, and is the economic capital of the country.

The huge town of Kinshasa is a lively and creative city, the centre of exchanges with the whole sub-region. With less than 10 per cent of the population having a salaried job in the public and private sectors, the majority of the urban population earns its living in the informal economy. Consequently, one of the teams’ foci included social actors working in the informal economy.

Lubumbashi is the capital city of Katanga, the rich mining province of Southern Congo. Contrary to Kinshasa, Lubumbashi has always been an industrial town. With a smaller, yet still important population, Lubumbashi is a quiet and relatively ordered city with an economy less informal than that of Kinshasa.

In DRC, the principal users of DFS are young adolescents. The attraction to this service, the team found, lies in their adaptability to use mobile phone “grammar” and the coded ways it is used to communicate. Mobile money is practical. It solves a number of the problems they are faced with and, more specifically, the distance they need to travel to withdraw the money sent. Students whose parents do not live in Lubumbashi constantly use mobile money services. The proliferation of mobile money shops near university campuses in Lubumbashi is evidence of this service’s popularity among students. At the same time, these youths are the main beneficiaries of the service as a large portion of them work as DFS agents. In contrast, we found low uptake rates amongst adults of around 50 years of age. In addition to students, our team concentrated their efforts on those men and women active in the (in)formal economy. Recognized for largely remaining unbanked, the informal sector has been

²⁰ Nyamnjoh, F. (2004) *Images of Nyongso Among Bamenda Grassfielders*. Langaa Publishing CIG

quick to adopt DFS. The team worked with, amongst others, market (wo)men, traders, merchants and land owners, also identifying those who were not using DFS within this sector.

4.3 Senegal: Louga & Dakar

The choice for Louga and Dakar was a choice for the difference between a city with a rural and agricultural hinterland and a city that is more urbanized. We expected different forms of mobile money transfers to dominate these two cities, so we planned to cover different forms of trade and various actors. Research results, however, did not indicate significant differences between the two case studies, apart from expected tendencies linked to distribution networks and infrastructure (electricity and roads).

The Louga region is the third largest in the country and mainly an agricultural and pastoral area. The region's economy depends on agriculture, livestock breeding and, to a lesser extent, fishing. Louga is one of the top three areas of the country in terms of international migration and the subsequent transfers of remittances.

Dakar is situated on a peninsula, and its economy is more detached from the rural hinterland than is the case in Louga. Both cosmopolitan and traditional, this urban metropolis reflects the hybrid nature of West Africa.

The choice of these two cities can be explained by, among other things, the need to understand actors in a highly urbanized city (Dakar) and a relatively rural one (Louga). Money transfer services have developed rapidly in the informal sectors of Dakar's suburbs and in other areas with high emigration rates such as in Louga. The team focused on the influence of the informal economy and the effects of migration in the use of mobile money. They also concentrated on what mobile money was most used for, leading them to focus on (small) daily transactions. These types of transfers are vital, especially as regards everyday expenditure, and can inform clients' choice of products.



Picture 3: At the same mobile money agent and within 30 minutes of each other, different “user profiles” carry out a transaction, Pikine Savenelles. LARTES-IFAN.

4.4 Zambia: Lusaka & Kitwe

The copper industry has been the dominant factor in Zambia's economy from the 1920s onwards. It resulted in high levels of labour migration. This, in turn, led to high levels of urbanization—the population mostly concentrated in the Copperbelt towns—but also to high mobility between urban and rural areas. This movement of labour went hand in hand with the sending and receiving of remittances, forming one of the contexts within which current DFS can be understood.

For the study, the team selected two case studies within Zambia: (1) Kitwe, a large city on the Copperbelt, the industrial heartland of Zambia, with high unemployment levels and much scope for expanding financial inclusion; (2) Lusaka, the capital city of Zambia, which has seen the highest poverty reduction rates, but continues to experience highly unequal development patterns.

Kitwe is a secondary city in Zambia, with over half a million inhabitants. As an industrial hub, it has a good potential for growth in financial inclusion. Especially in the peri-urban and informal settlements of Kitwe, financial inclusion still has scope for improvement. The case study focused on recently developed mobile money services, such as Zoono and MTN money, and whether or how these increased financial inclusion.

Lusaka, with a population of over 2.5 million, probably has the most potential for growth in financial inclusion. By following social actors such as entrepreneurs, students, civil servants, bus drivers, etc., the researchers aimed to get an impression of how DFS feature in different settings, including the rural hinterlands of the two case studies.

5. Research questions

The research questions, as set out in the Terms of Reference (TOR), were adapted during the writing of the Inception Report. As the project developed, some of these questions became more pertinent than others. By approaching aspects of the research questions through the perceptions of (non-)users, a unique light was shed on the uptake of DFS. For example, instead of discovering “What the level of formal banking is in each country and what its impact is on DFS”, the research teams concentrated on (non-)user perceptions of the formal banking system and what impact these *perceptions* have on DFS uptake. We have identified four key research questions that, in turn, inform the organization of this report.

Key Research Questions

1. What makes up the infrastructure of DFS in general in SSA?
2. How is the 'meaning of money' changing in the context of digitalization?
3. What are the factors informing people's perception & attitude to MFS?
4. What is the impact of DFS on financial inclusion?

While there is significant overlap between the (sub-)questions and their answers, for the benefit of the reader, we have attempted to identify where which research questions have been answered. The first question and, to an extent, question two, have been dealt with in section II: The mobile money ecosystem. In section III: Ethnographic findings, we will look closer at the second and third key questions, guided by the sub-questions listed below. In order to answer these questions, we have identified the six themes mentioned in the Introduction to this report. The analysis presented in section IV will deal with the fourth and final key question and its sub-questions.

Sub-questions KQ 1 & 2

- What are the chain of actors in each country?
- What is the level of formal banking in each country and what is the impact on DFS?
- What alternative systems of money transfer are used?
- How do DFS affect the flow of money within the economy?
- How do DFS interfere in the conceptualization of economic transactions?

Sub-questions KQ 2 & 3

- How do new technologies such as DFS enter society?
- How do DFS relate to the political & cultural understanding in the socio-economic contexts of the four countries?
- What about the historical context?
- What role do regulation and technical appropriation play in understanding DFS uptake?

Sub-questions KQ 4

- What does (digital) financial inclusion mean in different African contexts?
- To what extent are DFS consistent with the needs of local people? (e.g. affordability)
- How do DFS intrude into mobility & connectivity dynamics?
- Does the fact that money can be transferred digitally influence existing modes of access to wealth?

II. THE MOBILE MONEY ECOSYSTEM



Fig 1: Advertisements for mobile money are ubiquitous in the African cities that we visited in recent months (advert compilation by the Dakar team).

Digital financial services have developed differently in Cameroon, Congo DRC, Senegal and Zambia. This differentiation in the development of DFS available is linked, to some extent, to the countries' communication infrastructures as well as the regulatory standards as formulated by the national states and supranational institutions. Together with the (potential) users of DFS, these services and the setting (infrastructure and regulation) in which they exist make up the mobile money ecosystem. This section of the report will give an overview of the “mobile money ecosystem” as the researchers encountered it, and as described to them by their informants. As the approach was to understand mobile money through the eyes of users and non-users, this report lets their voices and opinions precede the researchers' own “outsider” views. For a comprehensive (general) sector-informed overview of DFS ecosystems in the four countries, we refer you to the reports provided by UNCDF/MM4P and GSMA/Mobile Money for the unbanked.²¹

One thing that has become clear throughout this study is the fact that technological innovations such as DFS involve more than just the “technical”. As elaborated in the Research Approach (see III.3),

²¹ Cameroon: UNCDF/MM4P (2014) ‘Digital Financial Services in Cameroon’, http://mm4p.uncdf.org/sites/default/files/Documents/cameroon_bn1_dfs.pdf, accessed on 21 March 2017.

DRC: Di Castri, Simone (2014) ‘Enabling Mobile Money Policies in the Democratic Republic of Congo: Leadership, pragmatism and participatory approach to creating a competitive market’; GSMA/Mobile Money for the Unbanked, <http://www.gsma.com/mobilefordevelopment/wp-content/uploads/2014/04/Enabling-Mobile-Money-Policies-in-the-Democratic-Republic-Of-Congo.pdf>, accessed on 21 March 2017.

Senegal: UNCDF/MM4P (2014) ‘Digital Financial Services in Senegal’, http://www.uncdf.org/sites/default/files/Documents/bn_senegal.pdf, accessed on 21 March 2017; UNCDF/MM4P website, ‘Senegal’, <http://mm4p.uncdf.org/where-we-work/senegal>, accessed on 21 March 2017.

Zambia: UNCDF/MM4P (2014) ‘Digital Financial Services in Zambia’, http://www.uncdf.org/sites/default/files/Documents/bn_zambia_final.pdf, accessed on 21 March 2017; UNCDF/MM4P website, ‘Zambia’, <http://mm4p.uncdf.org/where-we-work/zambia>, accessed on 21 March 2017.

DFS are tools that are appropriated by the economies and people in which they are introduced. This appropriation is partly informed by the historical socio-economic contexts of the country. The country descriptions below include a summary of these contexts in order to help us understand the setting in which DFS and their potential users are situated. They then continue to give an overview of the different mobile money providers encountered in the case study regions. The level of detail varies per country and provider, reflecting the information provided by informants—based on where “following” the actors in the mobile money chain led our researchers—as well as the expertise and interests of the different research teams. At the end, a brief comparison is made of the four countries’ regulatory frameworks in relation to DFS.

1. Cameroon

In the case of anglophone Cameroon, represented here by the two studies in the Bamenda Grassfields, we see how trade, commerce and a history of labour migration to the plantations in the south has informed popular types of monetary transfer systems. Archival research shows a strong level of auto-organization when it comes to the saving and sending of money. People were used to these practices long before the highly mobile plantation economy and our research shows how, after independence, the Credit Unions were established as a means to help people save and borrow money.²² Alongside the Credit Unions, the *njangi* systems have also had—and still have—a strong presence in anglophone Cameroon. The popularity of these pre-existing monetary systems gives us insights into the relatively slow DFS uptake.

In Cameroon’s case study sites of Bamenda Town and Baaba village, there are currently only two MNO’s providing mobile money services—MTN and Orange. MTN was the first to introduce mobile money in Cameroon, through a partnership with Afri-land Bank. A first memorandum of understanding was signed in June 2011 and the service became operational in 2012. MTN Mobile Money offers money transfer services and the payment of bills (water and electricity). Clients open an account with MTN and not the bank itself, though Afri-land is in charge of making sure the accounts opened respect banking regulations. In February 2013, Orange Money was introduced in Cameroon in partnership with Ecobank.²³ Orange Money provides services similar to those of MTN Mobile Money, but with the additional possibility of paying for flight tickets as well as transferring credit. They have also expanded to include a partnership with Total, allowing their customers to pay for petrol through their mobile money account. This specific service became operational in February 2014, marking the moment when informants indicated Orange Money actually started being effective. A second agreement between Orange and Ecobank, to develop and introduce additional products, was signed in December 2015 and shared with Ecobank customers in January 2016.²⁴

Mobile banking services, as provided directly by a classical bank, are fairly non-existent within the Bamenda Grassfields. Bamendan banks advertise the service but the uptake is very low. There are several reasons for this: an unreliable electricity connection, a poor internet connection, and lack of knowledge about the service among potential users. Instead, our researchers found that micro-finance institutions such as Credit Unions are very popular amongst the Bamenda population. These Credit Unions offer credit, saving possibilities and money transfer (tele-cash services)—similar services to those provided by classical banks. The paradoxical downside of the Credit Unions is that money can

²² For further reading: Nkwi, W. and E. Ngang (forthcoming) ‘The changing meanings of money and its mobility in Bamenda Grassfields, Cameroon: An historical approach’ and the Webspace of ‘User stories’ (forthcoming).

²³ Source: *Cameroon Tribune* no. 00341/feb/2013 (a government newspaper).

²⁴ Source: Bamenda Branch Manager of Ecobank, March 20th 2017. NB: At the revision stage, additional information was requested from our research teams. Due to the internet black-out, our Cameroonian colleagues have been having a hard time communicating. Verification of some of the information presented here was done via mobile phone (mostly text messages).

only be transferred from one specific branch to another and that both the sender and receiver are required to hold accounts with the bank. In general, Credit Unions are considered to be more financially inclusive than banks because they allow the very poor to save small amounts of money (the minimum is FCFA 500, approx. 0.76 euro) and to withdraw this money at any time. Banks often require a minimum of FCFA 25,000 (approx. 38 euro) to open a current account and FCFA 250,000 (approx. 381 euro) to open a deposit account. These are large sums of money for those sectors of the population who live off (small) daily incomes. The Credit Unions themselves operate bank accounts with The Union Bank of Cameroon PLC, which are used to carry out bank to bank transfers. The Union Bank of Cameroon PLC plays the role of a commercial bank within the Credit Union network in Cameroon. All Credit Unions are supervised by the Credit Union League. Its function is to ensure that activities conform to standard banking procedures and processes.

The Rotating Savings and Credit Association (ROSCA), known among anglophone Cameroonians as “*njangi*” and among francophones as “*tontine*”, is another such a social network. As Nyamnjoh and Fuh (2014) write:

The concept of *njangi* has two fundamental meanings in Bamenda Grassfields. First, *njangi* generally refers to a social grouping whereby members pull their financial resources or human capital together to assist one another. *Njangi* groups permit members to develop some sort of social solidarity towards each other. This practice is deeply rooted in the culture of the people of the Cameroon Grassfields to the extent that belonging to a “*njangi*” group has become a central element of social personhood. In the Cameroon Grassfields *njangi* groups are found in all communities and age groups (*nkang*), often organized around gender, ethnicity, activities, generation, etc.²⁵

Nationally, and perhaps even regionally, the community-based *njangi* system and Credit Unions remain the most used. While mobile phones do play an important role in coordinating financial transactions within these systems, money is not actually transmitted through the mobile phone. Even though they are not strictly DFS, we have included these alternative monetary (transfer) systems in the Cameroonian mobile money ecosystem as their existence and extensive use help clarify the (lack of) DFS uptake.

Next to DFS provided by MNOs and the transfers possible through Credit Unions, MTOs remain a popular method of sending and receiving money—especially for (inter)national transfers over large distances and in different currencies.

2. Congo DRC

In DRC, the historical context in which DFS were introduced is one in which the informal economy plays a large part, coupled with a lack of communication infrastructure and a history of bank defaults. The financial crisis in the early 1990s was followed by a twenty-year-period in which banks did not function. It is only as of 2005 that banks have started to reappear, due to a return on investments related to the beginning of the mining boom. After the recent default of the BIAC (International Bank for Africa in the Congo) in early 2016, it took the state two months to intervene, once again creating a lack of trust. Apparently, such a setting, combined with an enabling regulatory framework, has been ideal for DFS uptake, both in Kinshasa and Lubumbashi, with the informal sector being one of its largest clients. DFS provide an ideal alternative for those not comfortable with using/not well-positioned to use traditional banking services.

²⁵ Nyamnjoh & Fuh (2014) *Njangi* Sociality: Mobility, ICTs and Mobile Money Usages and Practices amongst Poor Rural Farmers in the Cameroon Grassfields, Overview Report, Langaa RPCIG.

The existence of mobile money services in DRC is a recent development, with DFS services being introduced from 2012 onwards—following the release of a new regulatory framework by the central bank (BCC).²⁶ There are currently four main mobile financial services (MFS), provided by four different MNOs: Airtel Money, M-Pesa, Tigo Cash and Orange Money. Airtel Money was officially launched on 20 March 2012, making it the first DFS in Congo. At that time, it was presented as an important innovation in terms of financial transactions via mobile telephones. Innovation in the field of financial transactions proposed by Airtel Money consisted of various services such as the purchase and payment of goods and services by phone, the transfer of money, the withdrawal of money and the purchase of phone credit. Two and a half years after its implementation, in December 2014, Airtel Money in DRC celebrated its millionth user. M-Pesa, provided by the MNO Vodacom is the most used service according to our research results. It is most widespread in both cities and countryside, with its telecom network having the best coverage.

M-Pesa, which originated in Kenya, offers two types of mobile banking accounts: a standard account capped at around 100 US Dollars and a premium account capped at around 3,000 US Dollars. Users may deposit or withdraw money into or from their mobile banking accounts in Vodacom shops or with accredited agents; they may likewise transfer money to people without an M-Pesa account or a Vodacom telephone number, through the so-called Jeton Cash channel.

After M-Pesa, Tigo Cash has shown to be the most popular amongst informants. Chronologically, it is the second DFS provider to come to the DRC market (July 2012). According to the brochures distributed by Tigo Cash, this service has the following benefits: simplicity of transactions, with easy access to the menu by telephone, speed and great availability of the service relying upon a large distribution network and, above all, interoperability, meaning it operates with all telephone operators in the country, while offering transactions at affordable costs and ensuring the security of the funds committed. In October 2015, Orange Money was launched, offering similar services to those provided by the MFS above.

Services provided through partnerships between classic banks and MNOs are the latest development. Pepele Mobile is a partnership between the Trust Merchant Bank (TMB) and five mobile phone operators located in DRC (Airtel, Africell, Orange, Tigo, Vodacom). Besides offering deposits, transfers, and the withdrawal of money, it also provides the possibility to, amongst other things, makes purchases, pay bills and receive salary payments. PPM operates in Congolese Francs and US Dollars. It is multilingual: French, English, Lingala, Swahili, Tshiluba and Kikongo. Pepele Mobile is also available on multiple channels, i.e. via SMS, smartphone App, voice server, online or PC. Launched in Kinshasa on 8 July 2015, the service is not yet as structured as the other MFS available, making it more of a challenge to our researchers to find information on the service. People Mobile is

²⁶ Di Castri, Simone (2014) 'Enabling Mobile Money Policies in the Democratic Republic of Congo: Leadership, pragmatism and participatory approach to creating a competitive market'; GSMA/Mobile Money for the Unbanked, <http://www.gsma.com/mobilefordevelopment/wp-content/uploads/2014/04/Enabling-Mobile-Money-Policies-in-the-Democratic-Republic-Of-Congo.pdf>, accessed on 21 March 2017.

offered in TMB Bank branches as well as through independent (super)agents or intermediaries, who, in turn, can employ various agents to deal with customers directly.



Picture 4: Avenue Araucarias, Quartier Bel air, commune Kampemba, Lubumbashi. Serge Kimambwe

Libiki is a micro-credit service set up by a partnership between United Bank for Africa DRC SA and Airtel money DRC. LIBIKI is a mobile lending service that involves granting “nano-credits” to Airtel money users.²⁷ In reality, as an electronic money establishment operating in the Democratic Republic of Congo, Airtel Money lacks the authorization to grant loans, because the liquid funds it holds (in exchange for e-money issued) cannot be invested or used to grant loans. Based on the above, there is no doubt that it is the UBA that *grants* loans to Airtel subscribers holding an Airtel money account through the Airtel money system. Repayment of the LIBIKI mobile loan is made in the month after the loan is granted. The amount to be reimbursed is equivalent to the amount borrowed plus 20 per cent covering transaction and service costs. Nevertheless, the amount of the LIBIKI mobile loan is between 10 USD and 30 USD, or clearly below the minimum micro-credit set by FINCA (100 USD), one of the pillars of the micro-finance sectors in the Democratic Republic of Congo.

An interesting note, here, is that our field surveys revealed massive contradictions concerning the understanding of the LIBIKI service between Airtel agents and those of the UBA. Indeed, to have a LIBIKI account it is necessary, according to Airtel agents, to meet the aforementioned conditions, and for this to be done by telephone, including the possibility of confirming eligibility status, whereas the agents of one of the UBA branches located on the KIMPUANZA roundabout were unaware not only of access conditions, but also the very existence of the LIBIKI service. Finally, according to an Airtel Agent contacted, the LIBIKI mobile lending service consists of a loan granted to Airtel Money users intended to meet their unit purchasing needs via their MFS account in the event of a shortfall, instead of acting as a professional micro-credit service.

Towards the end of 2015, the government implemented the registering of SIM cards, making it mandatory to link these to an ID card. Since the existence of the mobile phone system in the 1990s

²⁷ www.africa.airtel.com/wps/wcm/connect/africarevamp/drc/accueil/entreprise/airtel-money/libiki.

until November 2015, and with the system of prepaid cards, there had never been a system of registration via the identity card of the holders of SIM cards.²⁸ When mobile banking started in 2012, it moved into an “anonymous” system where SIM card holders were not identified or registered. It was not until November 2015 that the government decided to register all holders of SIM cards and, as a result, registered users of mobile banking.

In the past, monetary transfers were often synonymous with anonymity. This anonymity is being threatened, though inventiveness is proving prevalent and people are still managing to transfer money anonymously: Photocopies of other people’s ID cards circulate and are used for registration purposes. Despite generally strict KYC/AML regulations for DFS, these fraudulent practices are carried out by DFS agents themselves. People in DRC have taken to and made DFS “their own”. While DFS were only introduced in 2012, and thus are a new product on the market, they seem to be providing a successful and interesting means of dealing with money—a means that may be considered successful because there was no pre-existing secure alternative system, and because the regulatory framework was adapted to accommodate them.

3. Senegal

In contrast to DRC, the case of Senegal presents us with a state that has always been fairly well organized (post-)colonially. The general sentiment is that people are used to a state presence and state institutions. As in all the other countries, people in Dakar and Louga are also used to sending money over long distances, making use of various networks, such as a village network of traders or the transport sector. While the more traditional monetary systems, such as *tontines*, remain popular, the DFS on offer, as well as their uptake, is fairly developed when compared to the other countries. A note of caution, however—many informants mention not having enough money to put into an e-money account and/or not knowing/trusting banks.

²⁸ The DRC team comments here (translated from French): “The factors underlying the Government's decision to identify the holders of SIM cards are both internal and external. From the external point of view, there was international pressure after the Paris bombings in November 2015 and the will to fight international terrorism. After November 2015, many countries in Africa imposed this measure: wherever it was easy to buy a SIM card without being identified, it is now necessary to present a piece of identification (Burkina Faso, Benin, Chad, Mali, Etc.). Concerning the internal factors in the DRC, there would have been fear of the use of social networks for citizen mobilizations that could lead to disturbances of public order (sending videos, calling for demonstrations, etc.) in an agitated political context, marked by the end of electoral mandates and the difficulty of organizing elections; For about two years, there has been a period during which there have been several political demonstrations and citizen demands. The Congolese authorities have thus sometimes restricted access to the Internet during periods of intense political tension. The combination of internal and external factors in this issue of registering the identity of SIM card holders is creating a situation where the state in the Congo seems to be in better control of the mobile phone sector than in the past.”



Picture 5: Money transfer services at close proximity to traders in a popular market in Louga. LARTES-IFAN

Compared to the other countries, Senegal seems to be the most (technologically) developed in terms of the DFS on offer. It too has a history of migration and the sending of remittances that infiltrates the present-day mobile money ecosystem. Some of the older, traditional means of transferring money still function alongside the newer, digital means. Informants mentioned the continued use of hand-to-hand transfers, which has an especially long history in Louga. This type of transfer makes use of intermediaries who generally belong to the same social networks (family, village, known via-via). Sending money by road via transport services also continues today, especially in (remote) rural areas without electricity and where DFS service points are almost non-existent. Sending cash through money orders at the post office was a popular system before the advent of newer monetary transfer systems such as MTOs. It was particularly used for international transfers by migrants sending money home. There is also still a prominent role for *tontines* when it comes to financial dealings in general (especially savings and credit).

Dakar and Louga host a variety of systems making use of digital technology. In the case of money transfers made without the use of a bank account, Wari and Joni-Joni are the most popular services at a local level. For international transfers, the MTOs Ria, Money Express and Western Union are the most commonly used, particularly by emigrants sending their remittances. In terms of sending money from one e-money account to another, these services are offered by Orange Money, Tigo Cash and Yobantel. They offer users the possibility to access their e-money accounts through withdrawal/deposit points, to make transfer between e-money accounts, the paying of bills, (Sonatel, SDE, Senelec) as well as the making of purchases from approved services such as supermarkets, restaurants and shopping centres. A fairly recent service to come to the market entails the transferring of money from a bank account to an e-money account. It provides the same possibilities as those mentioned above with the added bonus of customers being able to credit their e-money accounts directly from their bank account.

4. Zambia

Zambia has seen the presence of a strong socialist state. This, coupled with a dual economy based on labour migration and the copper industry, have shaped the context in which DFS were introduced.

Historically, banking services were provided by private banking services, either from the United Kingdom (i.e. Barclays) or South Africa (Stanbic). Standard Chartered bank opened its first branch in the erstwhile capital of Northern Rhodesia (Zambia), Kalomo, in 1906. The recent period of economic crisis (1990s–2000s) has dented the population’s trust and reliance on the state—and more importantly its banks—and helps to explain some of the current tendencies towards DFS. While DFS products are fairly developed when compared to Cameroon and DRC,²⁹ and successful uptake seems to be spread over different categories within society, people still have reservations in relation to consumer protection and regulation.³⁰ The role these briefly described historical contexts play when it comes to influencing people’s sentiments towards monetary institutions and money in general will become clearer in the next section.

In Zambia, we find numerous DFS providers. Although its operational licence was deactivated in 2013, Celpay was the first payment service provider to be introduced as early as 2002. Zoono is an interoperable mobile money provider that came onto the market in 2009 and remains the largest provider. Zoono makes use of the Airtel network for sending and receiving data, but is an otherwise independent company, relying solely on transactions for its profits. Unlike the more classical mobile banking services, Zoono works without customer accounts. Customers are only required to show their ID and to remember a personalized PIN code to conduct a transaction. Zoono is not yet a mobile money provider, but rather a money transfer service. It has only recently started to introduce mobile wallets (e-wallets).³¹

Airtel and MTN are the MNOs that began offering mobile money services (transfers, bill payment and savings) in 2011 and 2012, respectively. Airtel Money requires customers to have an account in order to make transfers and pay bills. Deposits have to be made at the relevant agencies to use Airtel Money. It also allows for bulk payments such as salaries to employees and casual labourers. MTN Mobile Money was licenced by the Bank of Zambia in 2012 and is a partnership with the Banc ABC. It offers similar services to those provided by Airtel Money, but has recently introduced a mechanism enabling its customers to obtain loans. The loans are provided by MTN in cooperation with JUMO, an outfit that is licenced by the Bank of Zambia as a non-deposit taking financial institution. It provides loans to consumers and small businesses without the requirement for any savings or collateral. Overall, Zoono leads the market in terms of mobile money services, despite the transaction costs being higher than those provided by MTN and Airtel. This could be attributed to the fact that the company has been in business longer than Airtel and MTN, usually has enough operational cash (float) and its easier to use since customers are only required to have national registration cards for transactions.

²⁹ Please see the UNCDF/MM4P and GSMA reports mentioned in footnote 24 for facts and figures.

³⁰ See also the analysis made by one of Zambia’s researchers in relation to poverty reduction, Kabala, E. and V. Seshamani (2016) Mobile Technology and Poverty Reduction in Zambia: A SWOT Analysis, *IOSR Journal of Economics and Finance*, 7(3.III): 61-74.

³¹ Byun, Jungian (2015) ‘Zoono: A study on third party innovation in digital finance’, FSD Zambia, August 2015.



Picture 6: Postal order, Northern Rhodesia (National Archives of Zambia)

Furthermore, there are banks that provide an instant, online or cardless option to their customers, such as Zanaco Xapit, FNB e-wallet and Barclays e-wallet. Zanaco in particular has a strong background in mobile money and has made significant investments in its successful Xapit programme that has been operational since 2008. Xapit has proved popular amongst farmers, traders, suppliers and the general public. Part of this popularity lies in the fact that internet access by mobile phone is not necessary, the software having been designed and tailored to also cater for low-income groups. Zanaco works in partnership with Airtel Zambia to provide Xapit. To further expand their outreach, Zanaco also uses the country's postal service, Zampost—reaching the unbanked population through their service known as Zanaxo Xpress.

In addition to the above-mentioned DFS providers, there are several other monetary transfer systems popular amongst the population. Swift Cash is a money transfer service provided by the Zambia postal services. Shoprite is a major South African supermarket chain that offers national money transfer and payment services to its customers. Western Union and MoneyGram continue to provide money transfer options, which are especially popular for international money transfers. MoneyGram has recently entered into a partnership with Stanbic Bank, making the service available through their bank branches (although these are few in Zambia).

When it comes to the historical context of monetary transfers, the role of post offices dates back to 1896, when the first post offices were established at Mbala, Fort Jameson and Chipata and Kalungwishi near lake Mweru.³² It now offers three financial services: Swift Cash, MoneyGram and Western Union. The services are accessible because of the widespread availability of the post offices. They also offer familiarity and trust. Rates for transfer are relatively high. On the negative side: the process is relatively cumbersome and the queues can be long.

³² In 1975, an Act of Parliament established a statutory body to run both Postal and Telecommunications. In 1986, the organization was incorporated into a Public Limited Liability Company and became known as Posts and Telecommunications Corporation (PTC). Its shares were held by the holding company ZIMCO, on behalf of the government. This was the status until 1 July 1994. In July 1994 the Zambia Postal Services Corporation (ZamPost) was created under the Postal Service Act No. 24 of 1994 after the dissolution of PTC, which separated the postal division from the telecommunications division. In August, 2009 the Postal Services Act No. 24 of 1994 was repealed and replaced with the revised Postal Services Act No. 22 of 2009, which defined ZamPost's mandate as providing postal and courier services, financial services including the creation of Post Bank (Source: Intermediary Report Team Zambia)

5. Overview of DFS actors and a note on regulation

As the above diversity in approaches to describing the mobile money ecosystem shows, informants, too, deal with an array of information, knowledge and uncertainty when it comes to DFS. Their stories (section III) reflect a certain confusion, identifying numerous players as “mobile money” providers when they may, in fact, formally, be seen as strictly a MTO. Table 4 has made a start at identifying the various mobile money players active in Cameroon, Congo DRC, Senegal and Zambia. What, then, can we say are the main chain of actors involved in DFS in each country? And how do the different kinds of DFS compare?

Sub-questions KQ 1

- What are the chain of actors in each country?
- What is the level of formal banking in each country and what is the impact on DFS?
- What alternative systems of money transfer are used?
- What are the differences between different kinds of DFS?

The chain of actors depends on the type of service and on the partnership involved. In general, several categories can be identified when looking at reasons for dealing with mobile money:

- (1) Payment of utility bills and school fees
- (2) Payment of salaries
- (3) Banking (savings and credits)
- (4) Sending of remittances to family/friends
- (5) Entrepreneurial-related transactions, i.e. payment of merchants/customers over distances
- (6) Buying of airtime
- (7) Direct payment of goods or services, i.e. in a shop

The chain itself, however, is a more complex one to describe as at each link in the chain, a different “direction” can be taken. Some users choose to pay their utility bills via an agent in their neighbourhood who provides such a service. This DFS might, in turn, be provided by a MNO in cooperation with a bank (e.g. Orange Money in Cameroon—a partnership between Orange and Ecobank), or perhaps it is a service working with numerous banks (like Zoonia in Zambia or Pepele Mobile in DRC). Depending on the country’s regulatory framework, this partnership with a formal financial institution is mandatory or not. Throughout the different field sites we encountered DFS constructed in the following ways (this list is not exhaustive):

- A MNO and a bank
- A third-party provider in partnership with several banks, MNOs and other commercial enterprises (ex. Zoonia in Zambia)
- A bank providing its own DFS (e.g. Barclays e-wallet in Zambia or Yobantel-Société Générale in Senegal)
- A bank providing DFS through several MNOs (e.g. DR Congo: Pepele Mobile was initiated in July 2015 by Trust Merchant Bank and works together with Airtel, Vodacom, Africell, Orange and Tigo)

- MTOs in partnership with a bank, post office or offering its own DFS
- MNOs offering their own DFS (most recently Orange Money in Senegal)
- Traditional/alternative organizations dealing in money transfers or payments (e.g. post offices, *njangi*, *tontines*, merchants or transport companies, etc.)
- Micro-credit services offered by a bank and MNO

Table 4: Major mobile money players per country (general overview in case study areas)

	Cameroon	DRC	Senegal	Zambia
MNO - bank partnerships	Orange Money, MTN Mobile Money	Airtel Money, M-Pesa, Tigo Cash, Orange Money, Vodacash	Orange Money, Tigo Cash, Yobantel, Wari	Airtel Money, MTN Mobile Money
Multiple MNO & bank partnership	Monifone	Pepele Mobile	Orange money-BICIS, Orange money-ORANGE, Tigo Cash-TIGO, Yobantel-SGBS, Joni Joni-UBA	n/a
Micro-credit service provided by a bank and MNO	info not available	Libiki	Orange Money, Tigo Cash, PAMECAS, IMCEC, Wari, Yonima Cash, Money Express, Money Gram, Ria, Joni-Joni, Western Union, Post One, Touba Transfert, Lamp Fall Cash, Tew Mi Tew, Yobantel, Nafa Express	ZANACO, BancABC, AB Bank, Micro Bankers Trust, MTN
Interoperable mobile money provider	Moneytel, Express Union Mobile	Jeton cash, Yebela cash	ATPE, SGBS, BICIS, ECOBANK, BOA, BIS, CBAO	Shoprite Money
Provided by banks	Orange Money	an Ecobank service (not yet operational)	Yobantel, Orange Money	Zanaco, FNB, Barclays Bank, Ecobank, FBZ, Stanbic Bank, Standard Chartered Bank

Table 4: Major mobile money players per country (general overview in case study areas)

	Cameroon	DRC	Senegal	Zambia
MTOs	Easy money, EMI, Express Exchange, Express Union, First Trust, Money Gram, Ria, Western Union	WESTERN UNION, MONEYGRAM, AGENCE GOLDORAK, AMI FIDELE TRANSFERT, AMIS FIDELES EXPRESS, ARMI GLOBAL BUSINESS, BOBO CASH EXPRESS, COLOMBE SERVICES, GRAINE DES ASS WAPICOM TRANSFERT, AGENCE BAUDOUIN TRANSFERT, MASEVO SERVICES, AFRIMAISON SERVICES, JJ WELCOME, LA PREDESTINEE, AGENCE M. FILS EXPRESS, CONGO LIGHT TRANSFERT, AGEFRAM, AGENCE AIGLON SERVIC, AGENCE ELSA COMMERCIALE, CHEMIN D'EMMAUS, MAMAN THERESE, BETANY SERVICES, REDEF TRANSFERT, KKM-NDJIMBO TRANSFERT, SHEKINAH & FRERE, ENTREPRISE DES FRERES, LA MAIN DE L'ETERNEL PROGRES, ZAM ZAM EXPRESS, MASSAH & MERIBA, AMBASSADEUR POUR CHRIST, MAC TECHNOLOGIE, MAISON LUPI, NKUMU WATO, POLYTUMBA & COMPAGNON, Troika service, AFRICAN EXPRESS, AGENCE GRACE D. WORLD BUSINESS, APOCALYPSE 22, AVIDA BUSINESS LINK, AXES SERVICES, COLIKIN, NEW CONGO SERVICES, CONGO TRANS, CASH EXPRESS, DATCO, TRANSFERT DE FONDS EWEDGE, EXPRESS UNION, KIN EXPRESS MULTI SERVICES, MALU TRANSFERT, SOFICOM TRANSFERT, SOLIDAIRE TRANSFERT, TRANSCASH, SOCIETE DE TRANSFERT AU CONGO (S.T.C), ZM BUSINESS, MONEY TRANS, WINKELE BUSINESS AGENCY	Wari, Joni-joni, Ria, Money Express, Money Gram, WafaCash, Baraka, Tigo Cash, Orange Money, Vitfé, Yonima Cash, Western Union, Poste One, Touba transfert, Lamp fall cash, Tew mi tew, Yobantel, Express Union, Yooni-Ma Cash, Mobile Cash, Nafa Express,	Zoona, Western Union, Swiftcash, MoneyGram
MFIs	Credit Unions, Unics PLC	BUSINA MICROCREDIT, ADEKOR, APE, HOPE RDC, VIA NOVA, HEKIMA, SOFIGL, Société de Microfinance Light in Business "SMF LBC", YOASI, CREP, SILVER, PALMIER, CONGO CREDIT FINANCE, CREDIT YA MPA, OXUS RDC, MAMA TOMBWAMA, PADERU, Société de Microfinance, FINCA RDC, LIFE VEST, SMICO, SMF P.D.I.D.E.K., OPPORTUNITY INTERNATIONAL RDC, TUJENGE	PAMECAS, MICROCRED, ACEP, Crédit Mutuelle du Sénégal, IMCEC, CNCAS, CPS	Agora Microfinance Zambia, Micro Bankers Trust, FINCA Zambia, Microfin Africa, Pulse Financial Services, CETZAM Financial Services
Alternative channels	njangi, postal services	merchants, trade	tontines, bus, postal services	Postal services, bus

How, then, can we understand the role of MNOs, financial institutions and the state in issues of access and power in relation to mobile money practices? In order to answer this question we need to first include the aspect of regulation into the analysis.

One of the main findings of this study pertains to the influence of people's *perception* of DFS regulation on its uptake (III.4) versus the actual regulation in place. The information presented here is in no way all-encompassing when it comes to DFS regulation, other sources such as UNCDF and GSMA reports provide more accurate (quantified) data in this regards. Nevertheless, it does provide a brief overview of the most pertinent regulatory aspects:

In the CEMAC country of Cameroon, the Central Bank (BEAC) has determined that banks alone are allowed to issue e-money. While MFIs are popular, they too are excluded. This has inhibited the development and growth of DFS products. According to a 2014 UNCDF report, "[...] there is no regulation clearly governing the establishment and validation of distribution networks."³³

In DRC, the Central Bank (BCC) is responsible for giving accreditation to e-money establishments such as those run by MNOs, a fact that is not widely known by the population. DRC's regulatory framework seems to be the most enabling, compared to that of the other three countries, in terms of providing opportunities for various DFS products to enter the market. A note of caution needs to be given, however, when it comes to KYC procedures and transaction limits³⁴ (see also III.4).

In Senegal, an ECOWAS country, the e-money market has developed slightly differently and (as of May 2015) an MNO such as Orange is now allowed to issue e-money directly. The BCEAO's flexibility towards the types of providers allowed to offer DFS is coupled with unfortunate market dynamics, which hamper their further development, accounting for the continued limited interoperability and limited services).³⁵

In Zambia, the relatively neutral legislation dealing with e-money specifically has been in draft form since 2013. The regulations, which are controlled by the Bank of Zambia (BOZ), are therefore lagging behind the dynamic innovations inherent to the sector. As they are formulated now, they inhibit the development of services beyond payments and money transfers. This helps to explain the limits of the success story, the growth has halted and usage could potentially be much higher.³⁶ Consumers bear the brunt as there is little customer protection.

From the outset, the diversity of mobile money chains and regulatory frameworks in existence have presented both a challenge and contributed to the strength of this research project. By starting with the actors within various monetary transfer systems, the researchers were able to situate the (potential) users within the complex socio-economic landscape (mobile money ecosystem). The next chapter (III) will present the ethnographic stories of (non-)users.

³³ UNCDF/MM4P (2014) 'Digital Financial Services in Cameroon', http://mm4p.uncdf.org/sites/default/files/Documents/cameroon_bn1_dfs.pdf, accessed on 21 March 2017.

³⁴ Di Castri, Simone (2014).

³⁵ UNCDF/MM4P (2014) 'Digital Financial Services in Senegal', http://www.uncdf.org/sites/default/files/Documents/bn_senegal.pdf, accessed on 21 March 2017; UNCDF/MM4P website, 'Senegal', <http://mm4p.uncdf.org/where-we-work/senegal>, accessed on 21 March 2017.

³⁶ "The country has a diverse and competitive market, primarily focused on payment services, but faces a diversity of challenges to reach its full potential. Despite being on par with transaction volumes, agents' revenues and profitability are lower than in other East African countries, explaining the slow growth of agents". Source: UNCDF/MM4P website, 'Senegal', <http://mm4p.uncdf.org/where-we-work/senegal>, accessed on 21 March 2017.

III. PERCEPTIONS AND ATTITUDES TO MOBILE MONEY: ETHNOGRAPHIC FINDINGS

This section of the report will focus on the ethnographic findings in terms of perceptions and attitudes towards mobile money, also known as the levers or drivers of DFS uptake and, ultimately, financial inclusion. We have identified six themes: (1) historical roots of monetary transactions; (2) mobility today; (3) technological appropriation; (4) regulatory perception; (5) networks of belonging; and (6) economic hierarchies. These themes should not be read as explaining a lack of success, but rather as stimulating an understanding of the mobile money ecosystem and the ways in which (non-)users relate to DFS. They are tools, providing a framework within which to understand motivations as well as challenges and obstacles for DFS uptake. We would like to note that our teams also observed general sentiments of satisfaction, including: an appreciation for DFS being flexible and anonymous, few administrative formalities needed, quick transfer rates, the possibility of transferring small amounts, low commission costs and they are often seen as being time saving.

1. Historical roots of monetary transactions

People's perceptions of mobile money are, amongst other things, linked to the historical context of monetary transactions. In Cameroon, we see how a history of economic migration, and the subsequent sending of remittances, continues into the present—the bulk of monetary transactions consisting of remittances, which people prefer to send through non-DFS. What explains this preference for non-DFS? And why is this different in DRC, for example, where DFS seem to suit the existing “bricolage”³⁷ economy. In contrast, people in Zambia would prefer more state involvement in DFS while at the same time tend to hoard cash at home. What historical aspects, then, affect current-day perceptions of DFS? This section illustrates the two main historical aspects that emerged from the four country cases, namely: (1) perceptions and experiences with financial institutions, historically; and (2) an historical reliance on social networks.

1.1 Perceptions of financial institutions have historic roots

When we examine the data coming out of Zambia and DRC, but also the stories heard in Cameroon and Senegal, it is clear that trust in DFS is heavily dependent on the historical confidence, or lack thereof, that people have in financial institutions. In DRC and Senegal, for example, people have a tendency to remove their salary from the bank account to which it was transferred, preferring instead to “hoard” it at home or depositing it in a *tontine*. What explains this tendency?

From a long-term historical perspective, state policies and a dual economy have influenced Zambian perceptions of money, banking and mobile money. The copper industry has dominated Zambia's economy since the 1920s. This resulted in high levels of labour migration, which, in turn, led to high levels of urbanization—the population mostly being concentrated in the Copperbelt towns— but also to high mobility between urban and rural areas. The movement of labour went hand in hand with remittances. In the early days of remittances, remittances took the form of goods, such as sewing machines, bicycles, cloth and soap. Postal transfers became more accessible to the African elite from the 1940s onwards. Take the story of informant Robinson Nabulyato, a store owner in the colonial days and the future Speaker of Parliament. In the 1950s, he was able to use postal transfer services to order his suits from South Africa while based in rural Southern Province. In fact, remittances and payments through post offices remained the most common method of transfer until quite recently.

³⁷ A bricolage economy refers to the day-to-day economy and includes the aspects of ‘muddling through’ and surviving. Bricolage is a form of creativity, in a way. People make do with what is available and make the best out of what there is in order to survive. Cf. Ayimpam, S. (2014) *Economie de la débrouille à Kinshasa. Informalité, commerce et réseaux sociaux*, Paris, Karthala.

While it became more common after independence for Zambians to hold bank accounts, these accounts were only accessible to formal wage earners, like civil servants. In practice, most people simply kept cash at home, mostly in their parents' bedrooms, as many of the informants relate. Saving options were limited at the time and transfers remained the dominant form of financial transactions. The divide between the middle-income class and the informal sector, between those who had access to banks and those who lived in a cash economy, was established early on and led to deeply entrenched exclusionary financial practices. The promise of the development of a broader based entrepreneurial class after independence remained limited as a result of the nationalization of Zambia's industry from the late 1960s onward. The creation of wealth during Kaunda's rule (1964-1991) was frowned upon and even seen as suspicious. One informant remembers it was difficult to have savings, because the secret service monitored excessive incomes. As a result, many people kept money in their house, under their mattress or even in their underwear.

It was hard for people to have money and deposit it in their accounts in the Kaunda era. Too much government intimidation. Government used to investigate people who had lots of money in their account. Even for having certain goods like colour TVs in your home. Officials would pay you a visit to enquire how you could afford a colour TV instead of a black-and-white TV. [...] Because of such government intimidation lots of people would keep money in their houses and that's why up to now many people still keep money in their homes.— Mr. Chibesa, taxi driver, Lusaka, Zambia

As a result of liberalization policies under President Chiluba's regime (1991-2001), banking became easier and the banking sector expanded rapidly. This proved to be a precondition of a flourishing mobile money market. Access to banking by the informal sector, however, is a recent phenomenon. The uptake is slow, suggesting that the majority of people are still hoarding cash at home. The state closure of several banks, such as Meridian BIAO in the mid-1990s, has made some respondents sceptical about the reliability of banks.

In DRC, the lack of confidence in the banking system emerged repeatedly during the interviews, and was evident in all the group discussions held in Kinshasa and Lubumbashi. This lack of confidence in the banks is linked to events that took place twenty years ago that led to the collapse of the banking system. These historical elements are hinged on an older, cultural element—the use of banks has never been widespread amongst the Congolese population, even twenty years ago. Banks have always seemed to be reserved for a group of educated, employed people—a group that constitutes but a small part of the country's workforce. Today, these cultural and historical elements feed each other to constitute a major obstacle to the use of classic banks in general, and to some extent, also mobile financial services.

I'm a civil servant. I don't trust getting paid through banks, as the history of Bindo and Nguma has taught me a lot. I am still afraid of being scammed by these banks. This is the case with the BIAC, which has no liquidity to pay its customers. I am always among the first to collect money once my account has been credited. I always empty my account. So, I don't trust the banks. Concerning Pepele Mobile, last month we were served by independent agents in Pepele Mobile outlets, but at the end of April, when we went to collect our salary, these independent agents told us that they had no money to pay us with. This meant we had to return to the bank. The conditions weren't ideal—I spent hours queuing up before being served. So Pepele Mobile changed nothing.—An anonymous civil servant and Pepele Mobile customer, Kinshasa

The Congolese have experienced significant trauma regarding banks because of the collapse of the banking system at the beginning of the nineties, but also because of money gambling of the Ponzi pyramid type. The most important schemes, which attracted a lot of money and to which our civil

servant above refers, were called “Bindo Promotion” and “Nguma Promotion”.³⁸ These money games, as well as hyperinflation in a period of deep economic crisis, contributed to the collapse of the banking system. Most banks filed for bankruptcy, closed their doors and their clients lost their money. DFS can offer an alternative in terms of paying out salaries, although they often have their own difficulties as well. The mobile banking/transfer industry is a very recent development and, as such, it is too early to tell how successful it will be in terms of differentiating itself from the history of financial failure of the banks. A large part of DRC’s workforce is comprised of the informal sector, which has historically been very inventive about finding ways to transfer goods and money. This efficient informal sector is one of the main adopters of DFS, a service which is regarded and used as an alternative to classic financial institutions like banks.

While in Senegal and Cameroon there was less focus on the historical role of distrust of financial institutions, the tendencies are similar. The monetary (transfer) systems formed since pre-colonial days and on into (post-)colonial anglophone Cameroon still exist and remain popular. Mr. Ndi, a journalist and blogger, describes the Credit Union’s popularity in saving and lending money at low interest rates to its members since its establishment in 1963. In doing so, he touches upon the role bank collapses have played in informing his financial actions:

The Credit Union is the best thing that we have in Anglophone Cameroon, because the security of our money is guaranteed. In the mid-1980s most banks collapsed because of mismanagement and corruption in Cameroon. e.g Cameroon Bank, Credit Lyonal Camerooniase, BIZ Finance. These sad events have never occurred in the Credit Union league, so how can I depend on Cameroon Banks again? Even the money transfer agency like Express Union, First Trust that also provide saving and loan schemes I don’t trust them I only receive and send money. When I am going to Ndu with money, I usually deposit it at my credit account here in Bamenda and collect at the Credit Union in Ndu. At times I also use Express Union though not often.³⁹— Cassian Ndi, a journalist/blogger based in Bamenda

In Senegal, too, similar stories were heard in relation to a distrust of banks, as Mr. T. explains below, although the situation appears to have improved over the years.

There are many financial institutions in the city and the people of Louga are very used to them because the transfer via hand to hand had enormous risks and there was a lot of embezzlement. The situation was so critical that it could jeopardize the whole money transfer system. Towards the 70s, 80s, banks did not enjoy a lot of popularity. One could give as example the case of the famous BNDS. Banks often went bankrupt and this created a lot of credibility concerns. Therefore, people were not used to the banking system and were afraid to put their money in banks. Furthermore, there were a lot of cases of embezzlements. Things have changed nowadays, banks are managed better and the attitude of migrants toward financial institutions has improved. Migrants are able to send their money safely to their families without fearing misappropriations.—Interview with Mr. T., 65 years old, Louga⁴⁰

In general, people in Senegal have more trust in the state and regulatory systems compared to the other countries due to the stable and peaceful political environment. At the same time, traditional *tontines* are still very active.

³⁸ Cf. Ponzi pyramid, Bindo Promotion and Nguma Promotion: DAVIS, Mike, 2006, *Le pire des mondes possibles. De l’explosion urbaine au bidonville global*, Paris, La Découverte; De VILLERS, Gauthier & Jean Omasombo Tshonda, 2002, « An Intransitive Transition », *Review of African Political Economy - State Failure in the Congo: Perceptions & Realities*, Vol. 29 V, No. 93/94, (Le Congo entre Crise et Régénération): pp. 399-410; DEVISCH, René, 1998, *La violence à Kinshasa, ou l’institution en négatif*, *Cahiers d’études africaines*, vol. 38, n°150-152, 1998. Disciplines et déchirures. Les formes de la violence. pp. 441-469; GONDOLA, Didier, 1997, « Jeux d’argent, jeux de vilains : rien ne va plus au Zaïre », *Politique Africaine*, n°65, mars 1997, p. 96-101; JEWSIEWICKI, Bogumil, 1992, « Jeux d’argent et de pouvoir au Zaïre : La ‘bindomanie’ et le crépuscule de la Deuxième République », *Politique Africaine*, n° 46 : 55-70.

³⁹ Fieldwork notes Emmanuel Ngang, April 2016.

⁴⁰ All interviews carried out in DRC and Senegal have been translated from French into English.

1.2 Monetary transfers and social networks in the past

Long before the advent of digital services, people were sending and receiving money. In Senegal, for example, transport services and merchants were relied on for national transfers, while the postal service was popular for sending home international remittances. In Zambia, the postal service played a similar role, as described in the section above (III.1.3). Some of these practices have been continued and built on in the present. In this section, we will briefly highlight what sending money looked like in one of the countries, namely in Cameroon. It was in Cameroon that researchers also incorporated personal and public archives into their case studies.⁴¹

Empirical findings point to the historical reliance on social networks when it comes to monetary transfers and dealing with money in general—a sense of being able to manage and trust those who hold your money. The story of the Cameroonian Fuam, as recounted on the Webspaces [URL], describes the historical ways in which money was transferred within anglophone Cameroonian society. While Fuam worked at the plantations in Victoria in the 1940s, she would send money to her family in Kom via people travelling home. One of the letters found in her personal archive details the transfer of money through a man named Johnson, who was travelling to Kom on his annual leave. The letter shows that Fuam not only remitted money to her uncle, but also dictated *how* she wanted the money to be used. In the correspondence that followed, a detailed description was given of how the money had been spent.

This example serves to underline the importance of personal communication throughout the remittance process as well as trust in the person used to carry the letter with money. Those remitting hard-earned money are heavily invested in making sure it arrives and that it is used as per their wishes—a situation that still resonates today. What, then, explains the continued security people feel with these alternative (social) monetary groups? This is a question that will be returned to at the end analysis of this report.

1.3 Synopsis: Historical roots of monetary transactions

Monetary transactions have historical roots, as do the perceptions of people vis-a-vis the different actors involved in financial practices. The historical context of each country's mobile money ecosystem is different, yet a few common denominators can be pointed out: (1) the historical role of the state when it comes to financial practices has had an impact on current-day choices people make when it comes to putting their money (and trust) in financial service providers; (2) the availability and existence of well-oiled alternative means of sending or saving money—as found in Cameroon and, although not discussed here, also in Senegal in the form of *tontines*—means there may be less of a need for more 'modern' services than those provided by DFS. Their existence also sheds light on the added importance of personal connections, trust and communication on how money should be/was spent.

2. Mobility today: The mobility of money and people

The historical patterns of mobility have laid the ground for today's cultures of mobility. We emphasize this here because it is one of the crucial elements in understanding the acceptance of mobile communication and it fits the mobile culture found in all four countries. At the same time, the way mobile money is integrated can also partly be explained through this mobile culture. All regions have characteristics of this "culture of mobility". To understand mobile money flows, it is relevant to mention the following characteristics of this culture of mobility: the economic remittances link, the

⁴¹ Similar stories may also be found in DRC, Senegal and Zambia, yet were not prominent in the research results.

creation of economic opportunities in a household, the social contact over distance, and the spread of families and networks. Such a mobile economy and internalized mobile culture is clearly a good foundation for the mobility of money.⁴² It is also one of the lenses through which people adopt and appropriate mobile money as a technique for their money transfers. First, a few levers and drivers of the flow (mobility) of money will be described, before touching upon the duality of being able to communicate and send money through mobile phone technologies—these technologies create opportunities, but also constraints.

2.1 Levers and drivers for the mobility of money

Mobile cultures, like those found in Cameroon, DRC, Senegal and Zambia, provide elements through which technologies such as mobile money can be introduced. This section will describe some of the specific characteristics (levers and drivers) found throughout the case studies and touch upon how these are linked and/or lead to money transfers.

In Cameroon, the mobility of money is strongly linked to the geographical mobility of people—for employment or study—as well as to consumption and social expectations. Money is sent to family members who need the financial support or in case of festivities and other ceremonies. In an urban area such as Bamenda, a certain sector of the population is seen using DFS services to pay utility bills as well as school/university fees. During Christmas time in Bamenda, the mobile phone network is usually over-busy as remittances are sent home by those living overseas. These remittances are then often dispersed further within the country. September is another busy month, as this is when school fees are due. DFS providers try and link to these seasonal surges in transfers, but this has little impact on those needing to reach rural areas such as Baaba. The urban-rural technological divide means that, for some transactions, the people of Cameroon's Bamenda Grassfields entrust their money to an MTO, Credit Union or *njangi*.

DRC's culture of mobility is similarly linked to the geographic mobility of people and goods. Such movements over large distances necessitate secure methods of communicating and transferring money. Amongst the informants selected, most sent money for commercial, consumptive, familial or educative reasons. While MTO's seemed to be used most for large commercial and international transfers, DFS were preferred for the relatively small transfers of school fees and contributions to familial affairs. A pre-existing culture of sending small (and large) amounts of money, in a country known for its lack of infrastructure, fits well with the possibilities provided by DFS.

The emphasis on international remittances was most present in the Senegalese case studies, both historically and currently.⁴³ Senegal hosts an enabling environment in terms of its government, regulation and business environment. Our team observed a massive use of money transfers through people-to-people (P2P) and over the counter (OTC) transactions. Money transfers are mostly done for consumptive purposes, with peaks in the volume of transfer during (religious) holidays for ceremonies or celebrations. As in Cameroon, the reliance on social networks and more traditional

⁴² To read more about a similar analogy in terms of research on mobile phones: Bruijn, M. E. de, F. B. Nyamnjoh, and I. Brinkman. 2009. *Mobile Phones : The New Talking Drums of Everyday Africa*. Bamenda: Langa Publishers.; de Bruijn, M. E. 2013. "Mobile Telephony and Socioeconomic Dynamics in Africa." In *Infrastructure and Land Policies*, 61–83. Cambridge, Massachusetts: Lincoln Institute of Land Policy.; de Bruijn, M. E. 2013. "Mobile Telephony and Socioeconomic Dynamics in Africa." In *Infrastructure and Land Policies*, 61–83. Cambridge, Massachusetts: Lincoln Institute of Land Policy.; de Bruijn, M. E. 2015, "New ICT and mobility in Africa" in N. Sigona, A. Gamlen, G. Liberatore, H. N. Kringelbach (eds.) *Diasporas Reimagined: Spaces, Practices and Belonging*, 140-145. United Kingdom: Oxford Department of International Development, University of Oxford.; Annie Chéneau-Loquay (2012) "La téléphonie mobile dans les villes africaines. Une adaptation réussie au contexte local", *L'Espace géographique*. 1(41): p. 82-93.

⁴³ According to World Bank data, personal remittances (received) make up for 11.9 per cent of the GDP in Senegal in 2015 but only 0.9 per cent in Cameroon. Further study will be needed to explain this.

methods (e.g. via transport services) for sending money is often linked to the support of family members outside of cities where certain infrastructures, like those needed for DFS, are lacking.

Next to consumptive behaviour, Zambia's dual economy linked to wage labour and the copper industry are the main reasons for the transfer of money (trans)nationally. As in Senegal, the use of DFS to pay utility bills is fairly developed. Informants interviewed also carried out commerce between cities. This mobility of goods, coupled with the possibilities that DFS provides, mean that stock can be purchased in a more secure way.

What kind of levers and drivers did we find in the different case studies? And how are they related to the mobility of people? All cases show the importance of the rural-urban linkages that have been established within their mobile culture? Across the country cases, the need for and potential of DFS are linked to the reasons people have to transfer money in the first place. In this sense, the flow of money affects people's perceptions of the "usability" of DFS.

2.2 The duality of "the need for speed": Social networks and DFS as a constraint

DFS obviously also impact the format of and speed at which money can flow—money is made digital and can technically be requested at any place and any time of day, a development with a flip-side according to some informants. As Fuam's historical example of remitting money via post (III.1.2) illustrates, this remitting is linked to expectations of money being sent and of how it should be spent. In the past, not having money on hand could provide an excuse for not answering a request. With current technologies like the mobile phone and DFS, such an excuse becomes less valid. This was an aspect that emerged particularly in the Senegal cases.

[...] now, with the development of money transfers, whenever a family member asks for money, you need to make it clear - either you have money or you don't. You can no longer claim you can't get it to them (hand to hand delivery, timetable: road transport, etc.) because if you say that, the person will answer that you should send it by Wari, Joni-Joni, etc.—Policeman, service user in Louga

Due to the relative ease of sending money through DFS, social pressure to do so has increased. Family in Dakar and Louga can easily reach out to their emigrant relatives abroad, who have trouble coming up with excuses not to send the requested funds.

[...] of course, the development of money transfers has brought about transformations at a social level. As the old saying goes, emigration doesn't bring about much profit but rather the possibility of economising and saving; for example, if you have a job in the morning and you earn 50 Euros, you save it but unfortunately in the day you get a call from WhatsApp or Viber to request money, and you have to send it because you no longer have any excuse. You can't save anymore because you also want your family to have a good life. Previously, the family would wait until you got back to pay some large debts; now you send money at the end of each month and your wife goes to the shop to pay. But there are some things that can't wait, like ceremonies or a death, when you are called upon to send money as soon as possible.—O. S., 23 years old, a DFS user and ex-manager of multiple DFS services in Louga

In a sense, the sending of money follows and replicates social logics—in the above case, familial expectations—already in place, with DFS playing a role in the regulation of consumption and expenses from afar.

2.3 Synopsis: Mobility today

In all four countries, the current mobility of money is based on a historical formation of society and largely informed by: (1) necessity, linked to a lack of infrastructure and government support as well as commerce and daily expenses; (2) the mobility of people via (e)migration, both domestically and internationally; and (3) the role of social networks and expectations. This mobile economy/culture is the basis for the embedding of mobile money. This offers great potential for DFS providers, although

we need to note that the concentration of these services in urban areas means that the rural population does not necessarily have them at its disposal. How, then, is the mobility of money linked to the presence and use of DFS by informants? Today's technological possibilities for always being in touch render the socially permissible excuse of not sending money void. This duality of ease-of-access versus an increase in social pressure is a cause of stress for many people.

3. Technological appropriation

Digital financial services are primarily the product of technology. This section focuses on how people relate to these technological aspects. The uptake of DFS is strongly linked to experiences with the technological side of these services as well as to knowledge of how they work. Technology and skill go together with each technology requiring a certain learning process. What skills, then, does one need to “use” this new technology? What perceptions exist towards the technological functioning and appropriation of DFS? And what are (potential) users still missing?

3.1 Infrastructure, access and reliability

Aside from ease of use and technological know-how, there must be basic availability and access to the technology. Below, our informants explain some of the issues they have been dealing with and how this affected their perception of using DFS.

3.1.1 Infrastructural reliability issues

While the success of DFS is partly due to the wide infrastructural outreach of MNOs, network coverage is still a hurdle to customer use of such financial services, especially in rural areas where cell network coverage can be lacking, or where coverage may exist, but agent networks may not be present. Network issues have not only meant that money cannot be transferred when needed, but also that money has gone “missing” in the digital void. The infrastructural technology of DFS providers⁴⁴ does not always seem equipped to deal with these situations.⁴⁵ In DRC, Mrs. Émeraude explains how disruptions to the system have resulted in phone credit loss and how this influences her views of mobile money with the same DFS provider:

Personally, I had heard of these new Airtel-money services. But I had serious reservations for a reason. It's because just for the activation of call packages or mega-bytes with a view to getting a more durable Internet connection, on several occasions I lost units due to repeated network disruptions. For example, I have 150 units in my Airtel account. I activate a package of 50 units once—this doesn't work. I try again—the same thing. And a third time—still the same. I leave it and wait for the network to stabilize. And when this happens, I get a message informing me that I have activated for 150 units, and that my account has no credit. What a disappointment! This happens several times. And even when I try to transfer credit to a family member's number, I send 50 units once and this doesn't work. I try once or twice again; all my credit is transferred against my will. And I lose all that due to these network disruptions. So it's because of these disappointing and demotivating experiences that I am distrustful about subscribing to Airtel-money. Despite this being my chosen network, which is used by most of my contacts [...].— Mrs. Émeraude, 60 years old, Mutombo, DRC

In this example, we can assume that the technology self-corrected to handle the errors and executed the transactions she requested. Mrs. Émeraude, however, perceived the transaction as having failed and so reissued it, attributing her loss of money to a technical failure.

⁴⁴ DFS providers and not MNOs as this is not always/necessarily an MNO issue (especially when DFS is issued outside of an MNO partnership). It is, however, important to note that informants often only hold the MNO responsible, not knowing how partnerships are constructed.

⁴⁵ This is, of course, coupled with a lack of enforcement of regulations, but in this section we concentrate on network coverage specifically and how it results in certain perceptions of DFS.

In Cameroon as well, customers complain of money having gone missing—being sent to the wrong number or disappearing due to network errors. While these situations are perceived as technological failures by informants, some may argue that they should be seen as instances of user failure, for which technology or the regulatory framework do not provide satisfactory recourse. Wherever the “failure” lies, it becomes a problem when there is no reliable customer service and legal framework in place informing and protecting such customers, ultimately allowing them to get their money back, an issue we will tackle below.

In short, the stories of informants relating to technological issues such as infrastructural reliability can be interpreted in multiple ways. The focus of this section is on the *perceptions of informants* on (the use of) technology, rather than on the actual technology itself.

3.1.2 Access: *The urban/rural divide*

Apart from losing money, the practical issue of a lack of rural DFS outreach is still very current in all four case countries. In Baaba Village, Cameroon, for example, there are no mobile money agents or MTOs. Potential consumers travel either to neighbouring Babessi, five kilometres away, or to Ndop, twenty kilometres from Baaba. This situation partly explains a reliance on alternative services like those provided by the Credit Unions or *njangi*. At the same time, the researchers encountered mobile phone agents who have found an inventive way of offering their clients unofficial (mobile) money. Mrs. Nguefack, for example, is a 38 year old manager of one of the call boxes in Baaba’s central market square. In addition to providing phone credit, she also provides battery re-charging services to phone owners. As of 2013, she has begun “helping” community members by receiving money transfers from outside the village in the form of MTN and Orange airtime credit. In turn, she gives the end beneficiary cash.

It is important to note here that the issue of rural-urban differences in outreach (in the Bamenda Grassfields) can partly be explained by the fact that many call booth/mobile money entrepreneurs complain that they cannot make enough profit from dealing in mobile money alone. Those that are successful have numerous side businesses to help them break even, with DFS being one of them.

I have tried my hand at a taxi business, a provision store, micro finance, and as a mobile money provider. Since April 2016 I have temporarily suspended mobile money services because it yields me no profits [...] these extra-economic activities enable me to support my family members [...] even when some of them do not appreciate my efforts [...] But that is life.—Mr. Menkefor, a secondary school teacher in Bamenda Town

Mr. Menkefor’s words echo those of other urbanites, who tried their luck providing mobile money services. In fact, the way the business of DFS is set up, it would be astonishing for someone to have a business exclusively dedicated to providing DFS. Most agents are small shops that provide various services in addition to DFS (and that usually service multiple providers). Nevertheless, what is important here is the existing expectation that becoming a DFS agent will provide a respectable income. The reality of this not being the case seems to be one of the factors impeding the expansion of DFS agents in(to) rural areas.



Picture 7: Clients at Mrs. Nguefack's call box collecting money, Baaba.
Photo: Emmanuel Ngang

In Zambia, an economy that has seen over a century of labour migration, remittances from the towns to the rural areas are also common. DFS has the potential to enhance this network, but the limited presence of these services in villages is regarded as a major hindrance. Only one provider, Zoona,⁴⁶ has a more consistent presence in the rural areas, but there they often struggle to have enough reserves to pay out (the float). One regular Zoona user complained that it took her niece in rural Mumbwa two days to collect K400 (\$35 dollars), because the Zoona booth near her village did not have enough float. In this era, Zambians demand speed and reliability when conducting their transfers and deals.

In Senegal, we also observed that the choice of transfer service is based on rapidity and accessibility to funds, i.e. the geographic outreach of the distribution network. While the DFS market coverage rate is optimal, diversified and competitive in Dakar, this cannot be said for Louga, particularly for its rural areas. As mentioned in the section on the mobile money ecosystem (section II), transport services are still being used as a means of sending money. The reason for this is a lack of DFS service points and/or no electricity.⁴⁷

Apart from outreach, in both Dakar and Louga, informants recounted recurrent issues with the network in relation to internet connectivity, especially during promotions by MNOs.

Sometimes you encounter network problems, especially when there is a promotion—you enter #144# but nothing happens. Except for the network problem, I don't see any other problems because even if you make a transaction and it isn't successful, you are sent a message informing you that the delivery has been cancelled.—B. C., sales rep, 29 years old, Louga

⁴⁶ The Zambian case often emphasizes specific firms and services, something that the other country cases do not always do. This has to do with the different approaches used, but is also linked to the availability of previous studies (secondary sources) allowing the team to build on and target specific providers.

⁴⁷ Interestingly, in Chad, transport services often have a little side business providing DFS services. Where previously they would carry cash with them between cities, this money is now deposited at the bus service provider's office/counter and sent via DFS to another of their offices/counters in the city of the money's end receiver. Source: Butter, IC (Forthcoming) Regional remittances in a connected economy: Financial transactions between Chad and Libya.

While the above and other examples from DRC and Cameroon are operator-specific and influenced by the technological system that underpins the DFS provider, it is interesting to note this difference in user perception.⁴⁸ In general, people find a way to use DFS, even when the service is not physically present in their village or when it has network issues. The knowledge of and need for DFS is there and it is probably only a matter of time before DFS providers expand into these rural areas.

3.1.3 Access to information on DFS

Information about how the technological side of DFS works is very important for first-time adopters. Individuals who are uninformed or confused about DFS are unlikely to adopt the services. What we see here is that the “strange” system of money transfer is also interpreted in relation to ideas (and perhaps even superstitions) that are cultural, related to wealth and money “use”. The idea of money transfer is still alien to them. As one Zambian teller explained:

The problem is that there are many people who don't have information on how DFS work and they don't even know what to say at a booth. I have had to instruct many people of what is involved in sending and receiving money before they could use it. Some illiterate people in Mutendere are against mobile money, they say “don't use it, it will eat your money”. This is because people don't understand that deductions are made on transactions due to service charges. Such confusion arises if the teller does not explain things properly to the customer.— mobile money teller, Mutendere, Lusaka

There is, of course, a whole world at work behind the simple money transfer that is difficult to access for people. This also leads to a mistrust of the companies that are thought to be behind it. This is especially the case when, for instance, evidence is sought in the event of problems with the sending and receiving of money. An informant recounted his experience in this regard:

One day, I want to send 50,000 FC to my mum (that is to say around \$54), but due to disruptions to the mobile telephone network, the transaction failed. I didn't receive any message confirming that the money had indeed been sent, but the amount of this transaction was deducted from my account. No one, even at the Shop, was able to solve my problem. They gave me the run around and eventually asked me to go to the Vodacom headquarters in town. Once I got there, I was asked to show an SMS as evidence that the transaction had taken place; yet I had never received an SMS. After more than four return journeys I decided to give up. There, at the company headquarters, they told me of a virtual contract that subscribers whose financial transaction cap was below \$100 could automatically sign up to when opening their account. Apparently this contract is only available to Vodacom and its financial service M-PESA. This contract is not even mentioned in advertising, and is not available.—anonymous informant, DRC

Here, we see a customer who actively pursued the loss of his money, but eventually concluded that he had not been provided with sufficient information about how the DFS of his choice worked. He had never heard of the contract he could have signed.

Poor information and awareness in relation to DFS affects uptake or leads to low customer satisfaction if they think the product is performing poorly.

3.1.4 Issues with agents

Users of mobile money highlighted certain complaints concerning the agents providing the services. Agents play a key role in promoting mobile money services, keeping the customer informed about how services work and removing worries when things go wrong. Negative experiences can discourage individuals from using the services. Problems with float, for example, influence user perceptions of DFS. Some agents frequently run out of float or cash with which to complete

⁴⁸ Read more about issues with rural outreach on our Webspaces [forthcoming], visit the story of Rachel Makonga, a mineral trader in the Kantanga, DRC.

transactions, forcing customers to search for another agent or return later. This tarnishes the reputation of DFS providers as a whole, and not just that of the single agent in question. Airtel users in Zambia remark that the principle of “*Shuwa Shuwa*”⁴⁹ suggests that DFS transactions will always go through, no matter what, but that problems with float, network and security work against this.

To me these problems with float work against the Airtel money principle of “*Shuwa, Shuwa*.” The principle of *Shuwa* to me means every time a customer comes, things will be there: e-value, cash for withdrawals and transfers will go through.—David, Lusaka

Because DFS are still relatively new, single bad experiences can damage the reputation of providers as a whole.

Mrs. Esther, a woman in her sixties in DRC, who does not have her own mobile money account but does receive money, explains some of the hurdles she has faced in relation to finding an agent who can provide her with the right currency.

On two occasions I was sent money via the account of one of my grandchildren. And once I got to the shop with her to withdraw the money, we were told to wait because the network was down! [...] We had to wait over two days to get this money simply because of a network disruption. On other occasions it was a problem with the currency to be withdrawn. I was sent \$100, but the agent we went to withdraw it from told us that there were no notes in US dollars to give us. He could give us Congolese francs, but this was worse, because it was at a lower exchange rate [...] And the deal required dollars. So, you need to go to more than one shop to get what you want. Because several agents are also currency convertors. So, they are reluctant to give up their hard currency. However, in transfer agencies [MTOs], this is never the case.—Esther, 60 years old, Mutombo, DRC

Currency issues and a lack of sufficient float combine with variable customer relations in general to influence people’s experiences with DFS. Unreliable opening hours were mentioned as an obstacle in relation to DFS agents (Zambia), while others hailed their flexibility (Senegal). Word of mouth seems essential for DFS to remain competitive. In Zambia, for example, Zoonas agents make a point of following up on their customers, making sure they have received a text message with transaction details.⁵⁰ Such additional customer services have affirmed Zoonas’ image as being a reliable transfer service. Interestingly, our informants in the other three countries hardly ever commented on one specific provider in this way. Perhaps this has to do with the fact that most make use of double SIM cards and multiple financial service providers.

3.1.5 Role of advertisements

Next to agents and word of mouth, the promotion and provision of information on DFS is done through advertisements. Several non-users expressed that they did not use mobile money because television/radio/print advertisements did not effectively communicate how customers could activate an account and where on their phone the mobile money account was located (i.e. how to access the service using the phone’s menu). Non-users across all age groups expressed the need to produce more adverts providing step-by-step instructions detailing the transaction process, and to engage direct sales agents to interact with customers for a few weeks until they become comfortable with the use of mobile phone technology. In the Bamenda Grassfields, for example, where there are only two

⁴⁹ *Shuwa Shuwa* was a slogan Airtel adopted in their mobile money advert to entail certainty and to guarantee users that they would have their money on demand whenever they went to mobile money kiosks to withdraw their money. It also meant that deposits of cash in Airtel accounts would be received with efficiency and at all times, tellers would be available to offer other reliable services such as money transfers.

⁵⁰ If the customer said “no” then the teller would write it down on a piece of paper and advise the customer to personally send a message containing the TRN and secret PIN to the intended receiver, who could then use these details to collect the money. In response to problems encountered by customers who forget their secret PIN, Zoonas has set up a system where customers can request a PIN re-send from their mobile money teller or call a toll free number and speak to a Zoonas customer service official who can activate a PIN resend.

mobile money providers (MTN and Orange), informants such as Mr. Ndi alerted our researchers to the fact that despite ubiquitous advertising, this is not enough.

MTN only send messages to people's phones but don't take off time to really go round the region to advertise. Even Orange money is only known by a few people who use Total petrol filling stations.— Mr. Ndi, journalist/blogger, Bamenda Town

In Zambia and DRC, informants also mentioned that these advertisements only seem to cater to a specific section of the population—they are not in the local language and the majority do not recognize themselves in the storylines sketched. According to Zambian respondents who had seen Zoon, Airtel and MTN advertisements on television, radio or print, these advertisements did not effectively communicate the functions of mobile money services (i.e. paying bills, sending or receiving money). Many users felt that these advertisements were not clear and only adopted the services once they had been introduced to them by friends or relatives. Most respondents complained about DFS advertisements not being sufficiently clear. One teller explained:

I used to see TV adverts for mobile money that were interesting. Like one advert where lights go off in a house and then people use their phone to pay for ZESCO. There was another one where a man is eating at a restaurant but he realizes that he has no money to pay so he uses mobile money. The song would say 'send money instantly', but it would not be too clear how it works. I only understood it when I started this work as a teller.— teller, Lusaka

Similarly, Mrs. Mapoma complained:

Some adverts are not easy to understand. I saw one where a woman was buying bread and was given half a loaf, then later a full loaf of bread and at the end of it all the message was on MTN mobile money. To me, it was so unrelated and wasn't clear what that was all about. Adverts are not so innovative to drive home the message. They don't address why DFS should be used and trusted over banks and physical payments.— Mrs. Mapoma, Kitwe

On the other hand, MTN and Airtel promotions, such as free airtime, prizes such as generators and draws to win money (at one time Airtel money had a promotion to win USD100 a day), do entice people to start using DFS. Although, according to a twenty-six-year-old entrepreneur from Lusaka, this is not enough.

Mobile money companies need to be more aggressive in their marketing. Every business should be using mobile money. There need to be more promotions to encourage people to use it. But they also need to clearly explain what kind of services are available because sometimes people don't understand. I have interest in financial payment systems, so I am always observing and listening to what people are saying. The other day my two sisters aged 22 and 20 were singing that Airtel Money advert song but when I asked them what Airtel Money was they said they didn't know. These are two girls in college, if they don't get what it's about then what more other people, especially those who are not highly educated. They need to make the message clearer.— T.C., 26 year old entrepreneur, Lusaka, Zambia

The importance of the use of local languages also emerges when it comes to the role advertisements play in helping the population understand what DFS provide and how they work. In the case of Orange Money in Senegal, it is obvious that the operator is making a lot of effort to reach more people, especially the poor: advertisements are made in the national language, with "famous" actors, on everyday topics and using accessible vocabulary in an effort to reach lower classes. This was not the case for banks targeting a sector of the population with a certain level of education.

Some may argue that it is not the function of advertisements to offer step-by-step guides on how to use DFS and that they should merely get people interested, encouraging them to approach an agent, who can then provide them with further guidance. The observation of the contrary throughout the country cases may tell us something about the level of information (potential) users are receiving

from the agent, causing them to look for alternative sources. It would be interesting to discover whether this might have something to do with the agent often being their local shopkeeper, and the relations they have with him/her?

3.2. Appropriation and attitudes to DFS technology

The Davis model (1989)⁵¹ identifies two factors that can explain the attitudes and intentions of people adopting new technology. Davis explains that the adoption of technology results from the perception of the utility of the technology and the perception of ease of use. The empirical data on people's attitudes towards the technological side of DFS also points to more social aspects in relation to technological appropriation—one related to the society/family/networks people live in and which inform how they interpret and thus appropriate technologies.

3.2.1 Technological (and financial) literacy

The perception of ease of use is partly related to levels of technological and financial literacy, an issue raised by informants in all four countries. In Senegal, a woman working in the fish market explains:

You know money transfer services are very useful and make our job easier when it comes to paying our bills. Nevertheless, this service is more suitable for the educated who know how to use it. In my case it's difficult because I am illiterate and my son is too young to help me [...].— R.G, a woman working in the fish market, Dakar

A certain reticence towards digital money was also noted, with the reasons mentioned being illiteracy and the risk of being scammed.

Personally I prefer receiving money this way rather than sending it. When you receive it you know in advance how much has been sent, while the other way round, due to my illiteracy, they can ask you more than they should for delivery costs. As I'm not too sure, if my son, who is at university, is not there, I prefer not to use them.— F.N., an ambulant beignet vendor, aged 47, married and the mother of 3 boys and 2 girls, Dakar

A note of caution here relates to consumer knowledge and access to information on how DFS work and related costs. In Senegal and Zambia, providers such as Zoona and Wari and Joni-Joni are very popular. Aside from practical reasons such as cost, sufficient float and availability, informants mention ease of use as one of the hurdles. In Senegal, the informal sector in particular prefers to use these simple money transfer services, instead of “classic” DFS, which are linked to an account, such as Orange Money.

I think Orange Money is more complicated than Wari, Joni-Joni and others. With Orange Money, you need an account with passwords—it's complicated, whereas with Wari you just bring your ID and that's that. Also, with proximity and our relationships with managers, sometimes they give you the money without an ID card.—D, 24 years old, welder, single (From an interview with young inhabitants of a suburb in Dakar)

In contrast to formal financial institutions like banks, DFS often do not require the user to pay monthly administration costs in addition to any transfer costs. Informants in Senegal and Cameroon indicated that they had not been made aware of the fact that if they deposited an amount into their bank account, that this amount would most probably diminish if not added to. As M.D.F. of Louga explains during a Focus Group Discussion on mobile money:

⁵¹ Davis, F. D. (1989), “Perceived usefulness, perceived ease of use, and user acceptance of information technology”, *MIS Quarterly*, 13 (3): 319–340.

What makes people more trusting of these money transfers is the fact that they are cheaper, with lower fees when you send money, and the fact that you can get your money whenever you want. Even if you want to open an account with Microcred, for example, you need only take an extract of your birth certificate or a residence certificate and you will get one right away; it's the same if you want to borrow money—just a few steps and the loan is granted. With traditional banks on the other hand, it's much more complicated, with what they tell you when you want to deposit money and what you actually do being completely different; if, for example, you deposit the amount of 1 million, and then to recover your money you find yourself with 960,000 F, with no explanation of where the 40,000 F went, and I think that's too much. This is something I've experienced, added to which is the fact that these new money transfers are not very popular, despite it being easier to work with them.—M.D.F., multi-services manager, Louga, Senegal

In this sense, DFS offer an interesting alternative as they do not require monthly/yearly administrative costs to be paid and can therefore provide a more appealing service to those not earning a (fixed) monthly income. In addition, small amounts can be deposited into the account while banks often require a minimum amount; likewise, small amounts can be transferred at a minimal cost.

In Zambia, Zoona leads the other two competitors in terms of mobile money service provision, despite its higher transaction costs. This could be attributed to the fact that the company has been in DFS business longer than Airtel and MTN, usually has enough operational cash (float) and its ease of use, since customers are only required to show a national registration card for transactions.

Returning to the issue of financial and technological literacy, the longer presence of providers such as Zoona in Zambia, or Wari and Joni Joni in Senegal means that there has been more time for people to become “literate” in the way they operate. This, combined with relative ease of use and access to understanding how DFS work, helps explain the preference for certain monetary transfer services over others.

3.2.2 Consumer protection: Lack of clarity fosters scepticism

While some seem to prefer DFS' flexibility, it is precisely this “informality” and the lack of security eluded to by a number of informants in Zambia, that have influenced their reluctance to use DFS. Even though we cannot necessarily compare the inventive mobile money service provided by Mrs. Nguefack (Cameroon) with those provided by official DFS agents described below, it is interesting to keep user-actions and choices in mind when examining both cases. It seems that in some contexts—Cameroon and, to an extent, DRC—the success of these informal DFS practices is a direct result of a lack of (formal) alternatives and a trust in person-to-person business dealings. In other instances, like that of Mr. Ngenda in Zambia, his avoidance of official DFS agents is linked to a lack of information relating to consumer protection. Mr. Ngenda is a 37-year-old bus driver at Kitwe's Chambishi bus stop. He wakes up at 5 am every day, with the hope of helping an employee, a marketeer or any person in need of his service, to get to their destination. His job requires him to be responsible for driving passengers from one station to another. He provides good customer service and a safe and comfortable journey throughout the network of bus services. Mr. Ngenda has been working as a bus driver in the public transport sector for 19 years.

Personally, I haven't even opened an account with MTN that many of the guys around the station use since I have very little information on the facts behind the services provided. But a few times when I get some time in the afternoon and the station is less busy, I ask the ladies who operate in the Airtel and MTN booths about what their core business is. They say a lot of good things and mostly they talk about withdrawals and deposits using mobile accounts. To me that's a good thing but I don't know the exact disadvantages behind these services. Most important for me, when I look around here, there's no security. These are like banks right in the street, at the bus station where sometimes we witness theft and all forms of pick pocketing. So I ask myself, why should I trust a lady who doesn't have guaranteed security with my K2000 (\$ 210) if that's all I have? What would happen to my money if this person is attacked? Who will be liable, is it her as an individual, MTN or whoever she works for? What if the

person she works for just started the business and can't even pay me back, do I have the time to start following them, dragging them to court and even appear there leaving my busy job which is my bread and butter? So there are questions that not even the teller can answer that make me not even use these services. I even discourage a few of my close friends and relatives from using them because one will not even know what happened to their money when the unfortunate occurs. My family is all here and if I need to send money I use a trusted person to do it for me or even deliver it myself if that person isn't available. I also have a bank account with Stanbic Bank and I deposit my money there. My boss also has a Stanbic account, so I just physically deposit his money. I guard against theft by saving in a bank that I know has been around for years. If robbers attacked it, another branch will still be there for me to get my money. For airtime and electricity, I just go and buy them physically. I don't even use mobile banking. I once asked an insider in the bank and they explained to me that sometimes with mobile banking services, you can be exposed to fraud. So I avoid certain risks that I know I won't have time to attend to should the unfortunate happen [...].— Mr. Ngenda, a 37-year-old bus driver in Kitiwe

Mr Ngenda points at a scarcity of information about liability to bearers in case of a loss of money in unforeseen circumstances. In his case, the lack of guaranteed consumer protection fosters scepticism about the reliability of DFS. With the rapid expansion of the DFS industry in countries like Zambia, where the number of DFS providers increased from ten in 2008 to 28 in 2015, the industry's regulatory environment has not kept up sufficiently and is often not known to the consumers.⁵²



Picture 8: Airtel Money and MTN mobile money kiosks located at high traffic sites near Nkana East/Chambishi bus stations in Kitwe town centre. Edna Kabala

In Senegal, one of the participants in a Focus Group Discussion in Louga points out the following in relation to the security of DFS:

I'd like to draw your attention to security. Although everyone uses these transfers, it is very interesting to monitor security; it's easy to get a licence and open a money transfer service, but fraudsters can do all sorts from their computers; they can defraud you and take all your money. Because I often hear this

⁵² The Zambian team clarifies, "As the financial market's landscape has changed, so too has mobile money. The number of designated mobile financial service providers has increased from 10 in 2008 (when the category was first designated) to 28 in 2015. Mobile money enterprises thus made up 17 per cent of all financial markets enterprises in 2015, up from 10 per cent in 2008, an indication of mobile money services growth." (source: compiled from Bank of Zambia data, 2015).

kind of thing on the radio, a manager who cheats people, and even if his services are guaranteed will never be paid back, and I think it's a lack of security for the manager. For example, also if you had millions in a Microcred account and one fine day they tell you there is a risk of losing your money, so to reassure us, no longer would they ensure our security.—M.D.F., multi-services manager, Louga, Senegal

M.D.F worries about the possibility of hackers and scammers taking control of DFS transactions and accounts. As was also the case in DRC, people in Cameroon and Zambia are constantly hearing about or experiencing money disappearing. While there are many factors involved and different explanations for money being “lost” in the digital void, it is the lack of clarity vis-a-vis consumer protection that fosters scepticism regarding DFS.

3.2.3 *Mistrust of financial institutions*

As hinted at in the section on the historical roots of monetary transactions (III.1.1), trust, or lack thereof, in financial institutions greatly affects people’s perceptions of DFS. How, then, do financial literacy and access to information or knowledge about how financial services work factor into the level of trust in financial institutions?

Two Senegalese informants explain their views on banks. They argue that there is a lack of disclosure when it comes to credit schemes and customers’ obligations, as well as a lack of flexibility in terms of consumer needs.

In respect of these traditional banks, my father once told me that generally banks only target officials with a payslip, as having the greatest chance of a money loan, and whenever these banks look only after their own interests and not those of the customer, they use innocent people, because they never give you credit unless they tax you or you can provide a guarantee. If you want a loan of 1 million, they want to you to [mortgage] your house, and you have to do it because you really need it. I think it's too much—you should get a loan depending on your situation.—A.N., 21 years old, holder of high school diploma, single, Dakar

Well, I’ve never worked with these banks, but I’ve seen people who’ve worked with them for ages; they say that these banks don’t explain in depth the criteria you are signing up to, and it’s not always when you’re in need that people will send you money, because they close their doors by 17H, unlike money transfers which are open until 23H and are much closer to us.—S.F. 20 years old, TATA bus driver, father of a two year old daughter, Dakar

While it may be argued that a lack of knowledge of banks and how they work (financial literacy) is more common in (poor) rural areas of the country, this is not necessarily the case. Like the two Zambian urban dwellers below, many of those that can afford mobile phone devices do not fully understand how the environment of digital financial services works. They feel unsafe about getting too heavily involved.

I’m surprised they just let banks do things as they please. Banks hire auditors but auditors can be bought. Bankers cannot be trusted. I think it’s good to have accountability in everything. For an unknown thing like mobile money if the payment hasn’t gone through it takes time to figure that out and there is no one you can shout at. If someone can hack into your email for those financial scams then what more your phone?—Rabecca, front desk manager, Zambia

I recently opened a XAPIT account because of school. It is a requirement for UNZA [University of Zambia]. Otherwise I don’t like banks. Those guys are thieves. So I support people like Austin Liato [a Zambian politician] who keep money at home or invest it. You can have K1,300 in a bank then next month you find it is K800.—Paul, mobile money teller and agent, Zambia

We must note here that, in Senegal and Zambia, we see a relatively higher level of trust in formal financial institutions. In Zambia, several of our informants mentioned having more trust in institutions

in which the state has a share. The assumption here being that the state would not allow a bank to collapse. Distrust of South African investors and foreign capital is a common theme in Zambia, after the privatization reform of the 1990s left most of Zambia's industry in foreign ownership. This distrust of foreign financial institutions is a position also taken in relation to foreign DFS providers.

3.3 Synopsis: Technological appropriation

A person needs various skills and sources of information to be able to successfully appropriate a new technology such as DFS. Across the four countries, (financial) literacy emerged as one of the hurdles to DFS uptake, as well as ease of use (often linked to this illiteracy). Another theme was a general mistrust of financial institutions, at times informed by a lack of technical know-how on the part of the customer coupled with a lack of transparency from the financial institution. When analyzing people's perceptions of advertisements and other sources of information, it seems that DFS providers target a certain sector of the population—the (literate) middle-income group. While some of the informants interviewed do identify themselves with this sector, many do not (more on networks of belonging in III.5). We found that it is, in fact, a much larger group that makes use of money transfer services and encounters problems with the appropriation of DFS. This report gives a voice to the illiterate, small earners, students, and of those working in the informal economy. Their opinions give interesting insights into aspects of trust and mistrust, as well the way in which the need for DFS exists while access to and knowledge of these services is not sufficiently geared towards their needs. DFS providers have not yet found the right “language” for their advertisements. In general, strategies to better transmit knowledge about DFS still need to be developed.

4. Regulatory perception

Our research shows that a lack of information on regulatory aspects of the financial system informs a lot of the distrust and scepticism towards DFS. While this report cannot pretend to give an all-encompassing account of how financial regulations are organized, it can give some insight into what the populations of Cameroon, DRC, Senegal and Zambia know about it, and ultimately how this knowledge affects their attitudes towards DFS. Whereas some users, for example, prefer the security provided by strict guidelines that require the showing of national identity papers, set opening hours of branches, or having to open an account to make use of the services, others see these as barriers and prefer the relative flexibility of alternative services. In DRC, for example, the Central Bank (BCC) is responsible for accreditation for e-money establishments such as those run by MNOs, a fact which is not widely known by the population. One reason for (initially) not advertising this is the fact that the population has a historical distrust of formal financial institutions. In fact, many of the users interviewed were not aware that the DFS provided by their local MNO agent was linked to and backed by a bank. In Zambia, on the other hand, some informants sometimes referred to their lack of knowledge about which regulatory body was responsible as a negative thing. Here, informants referred to the lack of security when depositing money at booths in public spaces, like a bus station or in a neighbourhood. Instead, they preferred the relative safety of a bank branch. At least at a bank, if they were to lose their money while transferring or depositing it, there would be clear guidelines in place for how to get it back. In the section below, we will delve deeper into some of these issues.

4.1 Consumer protection: Enforcement and vulnerable consumer groups

Issues around customer protection—whether personally experienced or heard about via word-of-mouth—were one of the main causes for doubt when it comes to DFS uptake. Whereas in the previous section we discussed how a lack of clarity fosters scepticism, here we focus on the duality surrounding the enforcement of regulations vis-a-vis consumers.

4.1.1 Enforcement of regulations and unreliable consumer protection

Even when regulations have been introduced and rights are known to consumers, informants complained that, in reality, there was no guarantee that they would be enforced. One such example illustrating this issue comes from Cameroon, where Emmanuel is a provider of mobile money services at Ntarikon Market in Bamenda. His experiences of attempting to recuperate lost money reflect those of numerous other mobile money users. In his case, he made use of MTN mobile money to transfer a fairly large amount of money. As it did not appear to go through the first time he sent it again. In both cases, the money arrived in the account of another (unknown) person, despite the phone number being the same. Emmanuel was sent in circles trying to get his money back, with little help from MTN. In fact, both MTN and the police protected the privacy of the individual who had wrongly received the money, claiming that the end-receiver's mobile phone records could not be traced for reasons of privacy. The privacy of the person who received the money wrongfully was more important than the alleged crime. Emmanuel recounts his story and MTN's failure to protect him:

Last year, 2015, around the evening period I sent FCFA 100.000 to my client's account on request, the telephone connection was very poor [...] after a short while, I still sent FCFA 100,000 making a total of FCFA 200,000. The money went to a different person. I went to MTN and reported, they asked me to get a clearance from the police for them to trace which account received the money. I did, but to date I have not been refunded the money by MTN.—Emmanuel, call box owner, Bamenda Town

The example given by Emmanuel raises questions about regulations and consumer protection. Even though Emmanuel is an educated man who knows how to access information and his rights as a consumer, he was still unable to recuperate the FCFA 200,000. As mentioned earlier, similar experiences exist with regard to phone credit disappearing. At times, this is due to charges incurred that are either not explained to, or known of and understood by the consumer. In other cases, issues with the network provider have been named as the cause. Consumers also refer to their accounts being hacked, resulting in money being sent to the right account number but being received by the “wrong” person.

Participants in a Focus Group Discussion in Kinshasa recounted a similar tale linked to fraud and scams in mobile money transactions:

I had sent money and the remittance code for this money to my sister, who lives in the interior of the country. The licensee there took the code and was able to transfer the money into his own account and told my sister that the code was invalid. We went to make a complaint at Vodacom, which claimed that my sister herself had given her code to someone who is not a Vodacom employee (despite the fact that it is necessary to give the code to the licensee if you want to withdraw cash). We lost this money. This type of fraud is becoming more common.—Jean-François N, Kinshasa

Unlike the case of Jean-François, it is hard to say whether the “disappearance” of Emmanuel's transfers was due to a glitch in the system or cyber-criminality. Either way, a consumer lost his money and the unsuccessful process of getting it back has affected the way he (and others around him) perceive the digital financial services offered by MNOs—people do not feel protected. Failure in regulation in terms of consumer protection means people prefer to use more reliable (alternative) means. While Emmanuel is an educated man and knows his rights (despite this not affecting the outcome), there are many others who are not as fortunate. The poor, uninformed and marginalized members of society often bear the brunt of the risk because they are usually the least protected consumers. They have relatively few avenues for seeking protection or redress.

It is important to note here is that while the “light” regulation of DFS is one of the main culprits behind the lack of customer protection for DFS users, it is also seen as one of the factors behind the mobile money success story. The relative anonymity it provides and *perceived* lack of traceability are what seem to make DFS particularly interesting for those in the informal sector and/or for those reluctant to rely on more formal financial institutions. The registration of numerous SIM cards under

a false name/ID card render transactions anonymous, to a certain extent, as there is no connection between the person officially linked to the SIM card and to the individual carrying out the transaction. Our researchers in DRC and Cameroon reported numerous instances where the mobile phone agent used either his own ID card or that of a random person he had lying around to register a customer's SIM card.

The lack of enforcement of regulations allows for fraud and security breaches to take place. In theory, DFS are extremely secure in comparison to other forms of monetary transactions. However, despite the technological possibility to trace money sent via a DFS provider, agents do not always have the know-how to do so, DFS providers/MNOs may have unknown reasons for not wanting to and even if customers know their consumer rights, our researchers found that they are often stuck being sent from person to person.

4.1.2 Financial inclusion versus protection of vulnerable consumer groups

The above comments on uncertainties concerning regulation and consumer protection are directly linked to the potential impact of DFS on financial inclusion. To a certain extent, (potential) DFS users are restricted by national financial regulations, in so doing, excluding a certain segment of the population. The Zambian bus driver, Mr. Ngenda, eludes to this, but the most direct reflections concerning this topic come from our Congolese informants:

These mobile money services have different standards for the rich and poor. For the over \$100 dollar account you need to sign a contract with the Shop, but for us, those with under \$100, there is no document to provide security. What's more, when you lose your SIM card, there is a lengthy procedure to re-open your mobile money account. Whereas the blank SIM card is automatic for all networks!—Johnny, Kinshasa

The separation of two different accounts—the cap on transaction amounts—mentioned by Johnny is linked to different levels of consumer protection. This leaves the poorest more vulnerable to fraud and it undermines uptake of DFS by these users. Not only Johnny, but minors using mobile phone services also see their limited access to DFS as an obstacle:

My father works in Bukavu. He regularly sent me money by M-PESA both to pay my school fees and for other day-to-day expenses [...] I can't withdraw more than 100 dollars a month because I have a standard account. Moreover, I'm still a minor, so I can't open a premium account as I don't have the necessary identity card (electoral card or passport).—Sarah, 4th-year student in Kinshasa

Just like Johnny, even though Sarah is a M-Pesa customer, her use of the service is limited—she is not allowed to open a (safer) account, which would also let her handle larger sums. This has to do with the risk-based approach to Know Your Customer (KYC), where different types of DFS accounts are introduced to the market. Accounts opened through agents, rather than via formal channels, and where the users provide a limited form of ID, also often entail a limited access to services. While this a broader regulatory protection against money laundering or other fraudulent account usage, in the case of students, low-income earners or other potential daily DFS users who do not fit the account criteria, this creates a potential risk factor. In countries like DRC and Cameroon, where other (affordable) infrastructures for sending money safely are missing, for whatever reason, it is precisely the small amounts that people send most. Even if these are small sums in the eyes of the DFS provider, people still complain. They do not feel protected, and feel that even small sums should be secure.

A subject linked to this issue surfaced in Senegal⁵³ and Cameroon. Here, people complained about the lack of possibility to save and apply for credit through their mobile money accounts. While the possibility of providing credit is product-specific—some provide credit and savings services, others do not—several informants mentioned not having access to them.

Another general comment found across the case countries was that depositing money into a mobile money account is free, yet it costs money to withdraw it. M.N., a 30-year-old manager of a general store in Louga selling mobile phones, photocopies and money transfers explains:

[...] But sometimes people prefer not to use Orange Money depending on who pays; when you deposit money into your account it's free, while if you deposit money into another account and someone wants to withdraw it, there is a charge. Also there is no interest however as long as the money stays in the account.

For those with a low income and the benefits of this fee not being evident, it becomes a hurdle. How, then, can regulation enhance customer protection for digital financial services while at the same time offering more inclusive services for those classified as “financially vulnerable” and thus seen as more of a risk by financial institutions?

4.2 Mistrust of financial institutions (regulation related)

As described above, an important observation by our teams was that a lack of trust in financial institutions hinders DFS uptake. This is linked to the unreliable enforcement of regulations, but also to (historical) experiences of state polices. Examples from DRC and Zambia show how some customers feel exposed to the risk of financial loss due to enduring political or economic instability:

DFS lets me easily buy credit, make deposits and withdrawals. And then, when a customer needs to pay me money for a service I've provided, or if they are far away, and if they use DFS, I prefer them to transfer mobile money [to me] [...] I never leave my account with more than 50 US dollars for long. DRC is an unstable country where anything can happen, and I will never forget the disasters that hit the banking service in the past. So I don't have much trust in it and I use my account carefully.—Diam, real-estate agent, DRC

Although Diam seems to be an intensive DFS user, his use is of the cautious kind. While his apprehension can be linked, in part, to the unreliability of customer protection, there are other factors at play—a lack of trust in the state, in terms of backing banks in times of need, coupled with a preference for cash in such situations. The DRC banking sector was absent for numerous years and has only recently (2005) begun to develop again, with an important set-back in the form of the Central Bank defaulting early 2016. Here, previous experiences with monetary loss and the role of the state is leading.

Zambian respondents regularly professed that they would trust mobile money services more if state and bank backing was stronger or more dependable. Some respondents questioned whether their money could be stolen, what would happen to their money if Airtel or MTN went bankrupt and whether the state was properly monitoring DFS. If the Bank of Zambia could provide formal guarantees, stating that mobile money was safe and that money would not just disappear, users might express more trust in mobile money transactions. On the other hand, some customers state that Airtel and MTN are international companies that have been around for many years and that they are therefore reliable. State and company regulations can expand trust in the mobile money system by ensuring transparency and establishing clear rules for transactions.

⁵³ “Senegal can be considered among the pioneers of Mobile Money; the country made its first forays into the sector in 2006. According to the BCEAO, in 2014, Senegal had 2.5 million people with an electronic portfolio, o/w 42% were active. Nevertheless, the current offer, consisting of transfers, credit top-ups and bill payments, among others, failed to meet demand for saving and credit top-ups by mobile (BCEAO, 2014).” Excerpt from Intermediate Fieldwork Report Senegal

4.3 Synopsis: Regulatory perception

In relation to financial inclusion, DFS are presented as holding the components that will provide financially marginalized individuals with a formalized channel of inclusion —i.e. branchless banking, alternative delivery channels and alternative credit scoring. However, in the interest of risk-avoidance, only certain products are offered to financially vulnerable consumer groups. This practice excludes certain members of the population who do not meet this criteria, but who could make good use of a reliable means of sending money. DFS providers could benefit from taking a closer look at who their potential customers may be and tailor products to their needs, finding a way to protect the “small” senders and making sure regulations are enforced.

5. Networks of belonging

Belonging is a concept that relates to the social life of people. People define what networks they “belong” to and, in so doing, also define those from which they are excluded. It is an almost intrinsic character of the social to include and exclude, to define who belongs and who does not belong. In the societies where we have been doing this research the networks of belonging are important for the daily subsistence of people. When the state does not protect, it is these networks to which people can turn. In the different societies where we worked it is clear that the social security systems organized by the state are minimal. There are services available in Senegal and Zambia, though these basically only cater to people who are part of the state (civil servants), and often these systems do not work—for instance, in the case of the pension system in Cameroon. People thus search for other networks of belonging, which they can rely on for social care. In most cases, the closest network of belonging is the family, but there is great variation in these, even the definition of family is not the same for every society. As we stated at the beginning of this report, mobile money/DFS is a digital abstraction of social relations. And in the social realm, monetary transactions are important, hence we expected people to reason in relation to feelings of belonging when making use of DFS. It is therefore interesting to see whether such feelings of belonging also result in people’s non-use of DFS. This is what we explore in this section of the report, by analyzing the roles of community, social exclusion and sentiments towards e-money. In some cases, it seems that DFS actually help people to circumvent the use of social networks, hinting at a change in society related to possibilities of social anonymity (individualization) provided by digitalization.

5.1 Community and formality

Besides the strong position social networks still seem to hold when it comes to dealing with money, other factors also play a role in the decisions people make when it comes to their money. Whereas for some these choices are more rational and cost-related, for others the feeling of belonging to and the trust they place in certain networks providing financial and social services is more important. A general observation throughout the four countries is that informants make use of a plurality of services depending on their needs and what is available, but also by balancing the importance of community and formality.⁵⁴

5.1.1 Social links and the day-to-day: Belonging to small-scale social networks

In Senegal, the development of mobile money and money transfer services has led to transformations vis-a-vis the strengthening of social ties and facilitating day-to-day issues. Rapid and cheap money transfers have strengthened social ties between relatives and friends, creating stronger feelings of belonging. Moreover, mobile money fits well in the Senegalese culture of paying living expenses on a day-to-day basis. This is mainly based on two reasons: (1) people find it hard to properly manage household expenses over several days, and (2) the “make do” culture of poverty: money is usually

⁵⁴ Community and formality are not mutually exclusive, community-oriented services are not, by definition, informal.

only available on a daily basis and not on a monthly basis. Excerpts from a Focus Group Discussion amongst young people in Louga help illuminate this statement:

Facilitator: The second aspect concerns the people here in Louga, their lifestyle. In Senegal, people tend to give money every day for their day to day expenses. Have these practices played a role in the development of these money transfer services? [...] there's one service that's really popular—Baraka, for example, you can deposit 100 thousand F (\$ 165) into an account and designate someone, each morning they can receive a message saying that you have 5,000 thousand Francs (\$ 8) to pick up, and she goes to pick up this 5,000 F. Like a spending system where you can deposit funds with the shop, you tell the shopkeeper he can give your wife 5,000 F a day. You see these services adapt to societal practices. Can we take that approach here? [...] In the Wari, you see people who get up really early to earn a few francs, and about 11h they have 1,500 or 2,000 F that they send through Wari. And then there are people who don't live with their wives, and whenever they give their wives the monthly housekeeping of 100,000 F, that lasts only 15 days, so sometimes they prefer to give it to the shopkeeper on the corner to ensure spending stays rational, at about 5,000 F/ day.

No. 3: That's true, but you also need to consider social relationships between shopkeeper and customers visiting the store. Because sometimes when things are low, it's the shopkeeper who gives you credit. But if you have your salary, you should try and deposit most of that; in that way the shopkeeper will buy goods, and then towards the end of the month he can give you credit. But if you adopt this traditional method, and each day you go to supermarkets or indeed wholesalers, and you ask for credit from a shopkeeper in the neighbourhood and he categorically refuses. This is down to our socio-cultural reality.

No. 2: I agree with no. 3. He's exactly right—it's due to social problems. It's our culture to pay expenses every day. So each morning the breadwinner heads off to find his daily needs, although we've adopted the European system a bit of saving money somewhere; but normally it's with someone you trust, because one day you might need money, and he's the one who will have it. So in my opinion, this is why Baraka never took off.

No. 3: I'd just like to add a couple of things, but bills are paid through Orange Money and Tigo Cash. Now, in respect of day to day expenses, we're not yet ready. We still use the traditional approach for bills.

The above discussion touches upon the different uses DFS and other monetary services may have, but also on the importance of socio-cultural aspects for successful uptake. Here, an interpersonal connection between the money agent, or shopkeeper in this case, and customer is important as it opens the door for credit requests. In a more formal setting, such loans would probably not be possible.

5.1.2 Anonymity vs. traceability: The DFS solution to the constraints of belonging

It seems, however, that these interpersonal relations are also sometimes seen as a constraint, causing people to lean towards the more formal services provided by DFS. The importance of confidentiality and anonymity through DFS transfers were mostly raised by our informants in DRC and Senegal. In Louga, for example, a family of emigrants prefer receiving money through DFS as it means that they can keep the exact sum to themselves:

Transactions [through DFS] are carried out discreetly; because previously, if you sent money to your mum, your family, via a friend, for example, everybody knew that you had sent money. Conversely, if your child sends it by transaction, you can pick it up discreetly in money transfer agencies without anybody being any the wiser.—O. S., 23 years old, Louga

This anonymity was also appreciated in DRC, but more in relation to the traceability of money and a lack of trust in the state. Despite the governments' recent attempts to register all SIM cards, tactics have been developed to ensure anonymity. In theory, the financial goings on of DFS customers should be traceable. Yet, the registering of SIM cards as well as actual transactions often still take place in other people's names. Here, this form of social anonymity is linked to fraudulent practices (see also III.4.1.1).

5.1.3 “Shopping around”: Rational decisions and social security

People’s financial decisions are informed by various factors in which rational decisions vis-a-vis costs play a role, but also the importance of social security provided by belonging to a financial community.

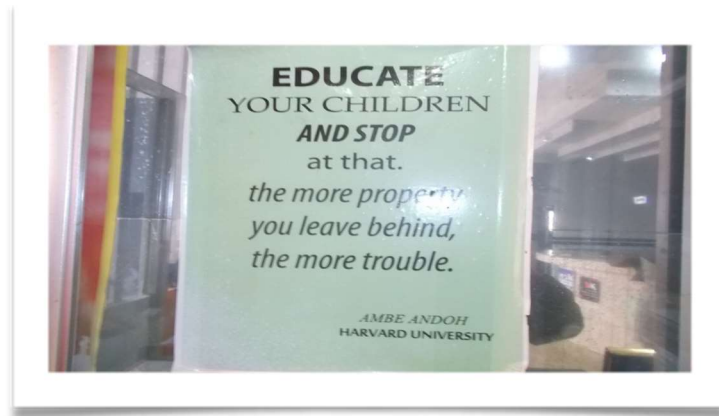
Mr. Menkefor, for example, is a civil servant in Bamenda, Cameroon, who has an account with Bambili Credit Union as well as an account with BICEAC Bank. As a civil servant, his monthly salary is paid through the latter bank account. The fact that Mr. Menkefor considers the bank charges to be very high means that he prefers to move his money and save it in a credit union. He believes his money is safe there while at the same time generating interest. As a member of the credit union, he is also allowed to obtain a loan to resolve any financial difficulties. In addition to the credit union, Mr. Menkefor also belongs to several *njangi* groups, namely the English Teachers Njangi Group, the 1982 CCAST Njangi Batch and the Ntaumlung Know Your Neighbour Njangi Group.⁵⁵ Mr. Menkefor explains that these formal and informal money saving groups encourage him to interact, socialize, save money and maintain connections and ties with friends.

Another savings group member in Cameroon sheds light on the various financial associations to which she belongs:

It was only in June 2013, when I got my first employment with Njinikom Credit Union, that I started having my own money. When I earned my first salary I opened an account with my financial institution. Even though my savings are very small, I think it’s better than nothing. I also belong to the Anjin women Njangi group here in Bamenda, where each of us contributes 5000 CFA monthly. Each member “picks” the Njangi until all members have benefited.—Ms. Melody, a 26-year-old accountant and single mother living in Bamenda

Ms. Melody has also been using MTOs such as Express Union and Express Exchange to send and receive money. She also makes use of the tele-cash serviced provided by Njinikom Credit Union to send and receive money, although their service is limited, as it only functions within the credit union. Ms. Melody stressed the fact that she is particularly satisfied with the services of Express Exchange because they are relatively cheaper, faster and it takes less time to carry out a transaction compared to the Express Union. To her, the workers of Express Exchange are polite, unlike those of Express Union, who insist on speaking in French, knowing that the Bamenda population is English speaking. Ms. Melody argues that financial services, especially credit unions, are inclusive. She points out that credit unions were established to cater for the poor who cannot open accounts with classical banks, enabling *buyam-sellams* to deposit small amounts (starting at FCFA 500) and save money. Furthermore, credit unions do not charge high interest rates for loans, which encourages members to obtain loans and develop their business to improve their livelihood.

⁵⁵ A *njangi* society is a group of members who come together, contribute money, and lend money to members. It is a social solidarity group based on trust. *Njangis* constitute the informal sector of saving money, and the practice is widespread in Cameroon. It is estimated that more than half of money in circulation in Cameroon circulates in *njangi* groups, which banks/ DFS cannot account for.



Picture 9: Bayelle Credit Union Bamenda (MFI) goes behind saving and borrowing and advises members how to invest wisely for their children. Emmanuel Ngang

As the examples of Mr. Menkefor and Ms. Melody show, people “shop around” when it comes to making financial decisions. Motivations for using a credit union, bank, MTO or DFS are related to ideas of security, costs and credit opportunities, yet the feeling of belonging to a certain network is also very present. Belonging to a financial community provides the social security many people need, a form of security that more formal financial institutions cannot provide.

5.2 Social exclusion based on self-belief: “Mobile money is not for us”

Knowledge and experience of DFS are almost automatically linked to perceptions of exclusion and financial marginalization. We found that while, at times, it is more of an underlying factor, at other times the feeling of social exclusion is referred to explicitly. On several occasions, our researchers heard people say that mobile money is not for them. In general, we see a divide in society between the middle-income class and those earning a day-to-day income. Interestingly, whereas in DRC (and Senegal to a certain extent) the informal sector has been quick to start using DFS, in Zambia and Cameroon those in the informal sector feel they do not have enough money to put into such services.⁵⁶ The Zambian research team notes the following:

In our fieldwork, the sense of social exclusion ranked high with those who did not access formal financial services. For them, banks, mobile phone shops and sometimes even the mobile banking booths themselves, are seen to be places to which they do not belong. To some extent this is exclusion based on self-belief: They feel like outsiders and even fear that on entering these spaces they will be refused service. The [flashy] advertising of these products reinforced this notion of exclusion. The adverts aim at common people’s aspirations, but seem to work against a particular class which feels excluded from social mobility.—Excerpt from Zambia’s Intermediate Fieldwork Report

A female merchant living in Lubumbashi believes mobile money is for “people who have studied”. She traffics minerals between Lubumbashi and villages located about 300 km away in the region of Kolwezi (DRC):

These mobile money innovations, I know nothing at all about. I hear people talking about it but I do not use it. Because I think it is better for those who have studied more than I have. And I also fear, if my phone is stolen, I would lose my money isn’t it? [...] I do not keep my money in the bank. In contrast, as gold never fails and has not lost its market value over the years, what I do is invest everything in my gold jewellery.—Rachel, mineral trafficker, DRC

⁵⁶ Exceptions and nuances always need to be made when it comes to statements like these. Nuances that would be revealed by further research into entrepreneurial women such as Ms. Muyenga in Kitwe (Zambia) and Mrs. Nain in Bamenda Town (Cameroon). To read their stories, please visit the project’s Webpace [forthcoming].

Rachel's viewpoint has to do with self-belief, but her comment also touches upon perceptions of financial institutions in general (a mistrust of the banking sector) as well as sentiments about savings. These sentiments are echoed by informants in Zambia, where some people see DFS as a (secure) alternative to banks:

Bank accounts are prestigious and it would be nice to have one. But we are just not the right class. The banks require so many papers to fill in just to open an account. You also find that the buildings themselves are intimidating with those flashy windows. I passed through one bank where you can't be served unless you press a machine for a ticket. That told me that this is really not for someone like me. If you compare MTN mobile money, it's in the station with no guards to make you feel like you are doing something wrong. The environment is so free and just what we are used to. We still get the same services of depositing and withdrawing like the formal banks and we have developed some level of trust because we haven't been disappointed or been turned down whenever we demand for our money.—Mr. Liseli, Kitwe

The above examples highlight how existing circles of belonging play a role in making people feel like they do not belong to newly created circles of belonging, such as those embodied by the happy mobile money family or by the big, modern physical structure of a bank branch. What role can DFS providers play in closing the (perceived) gap between these existing and new circles of belonging?

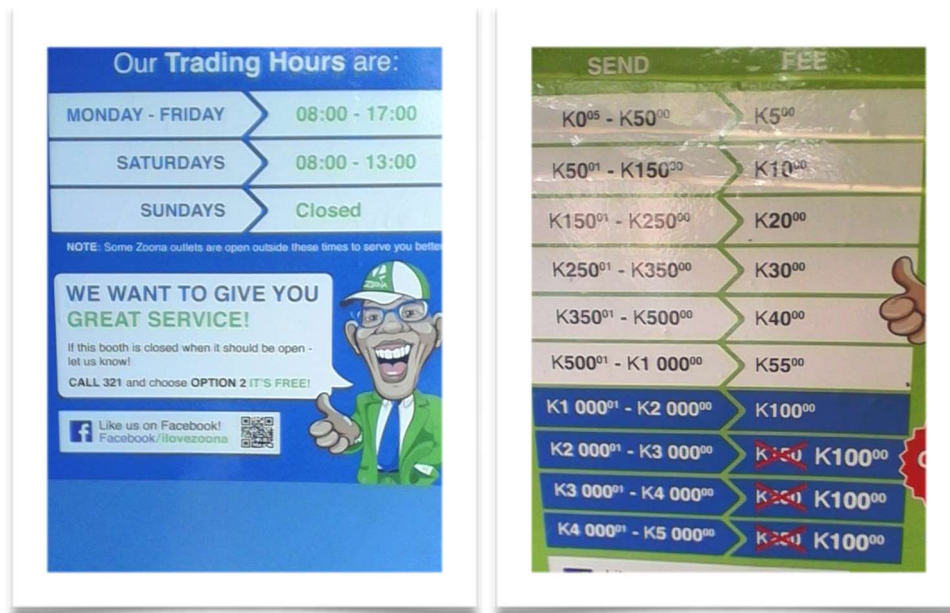
5.3 Sentiments regarding savings and e-money

Another factor that surfaced concerns people's perceptions towards the idea of money in general and to savings and electronic money in particular. A majority of the informants across the four countries had a preference for cash. This is partly due to an unfamiliarity with the general concept of e-money, but can also be attributed to a lack of financial literacy, a preference for interpersonal contact and even the simple fact that cash remains king in many day-to-day circumstances.⁵⁷ In a sense, we can say that people see themselves as "belonging" to a cash-based society, as opposed to one revolving around e-money.

In Zambia, a common sentiment heard across different generations was, "I do not like money moving in the air. I prefer to handle transactions using cash." Here, a Zambian bus driver Mr. Ngenda provides descriptive insights. Mr. Ngenda's job as a bus driver enabled him to increase his savings. Within a few years, he was able to buy a bus of his own. As he operated the bus, it dawned on him that he needed to use better options of savings rather than hoarding money at home. He opened a Stanbic Bank Savings Account solely for accumulating more savings from his business. He learned that the bank had other options, such as mobile banking, which would facilitate bank transactions using a mobile phone device. However, someone discouraged him from using mobile banking services. Mr. Ngenda's informant claimed that there was not much information on the technology behind it and how the bank protects clients from loss of funds through fraud. Traditionally, Mr. Ngenda has opted to pay for his bills using cash. He is aware of mobile money services operated by non-bank financial institutions in Zambia. He has little knowledge of the hours of operation for providers such as Airtel and MTN, who offer services in kiosks. He felt that mobile money is a great initiative, but one cannot trust these services because there is no guaranteed safety of funds, since the kiosks are located in bus stops and other open places with no security surveillance. This exposes both the depositor and the agent collecting money to theft of any deposits that may be stored at the kiosks. In addition, the attitude of tellers does not encourage use of mobile money services. He complained that, sometimes, tellers report for work very late and, at times, they do not open the kiosks at all. This means one cannot predict when their money will be available for withdrawal at a kiosk. Mr. Ngenda further

⁵⁷ To read about the preference for cash, even in Kenya where M-Pesa has been so successful: Iazzolino, G. & N. Wasike (2015) 'The unbearable lightness of digital money', *Journal of Payments Strategy & Systems*, vol. 9, no. 3: pp. 228-240.

noted that many of the kiosks are not monitored by banking authorities in the country. As a result, he would not use many of the services operated by mobile money agents through their kiosks. Alternatively, Mr. Ngenda has come to trust interpersonal connections for payment of bills and delivery of money. He is satisfied with settling payments in person or taking money to relatives himself. However, he makes an exception when the receiver of the money is so far away, as is the case with some of his relatives in Sesheke. He would then count on Zoonas because it is the service that most people say is very reliable and efficient for money transfers.



Picture 10 & 11: Two posters on the side of a Zoonas booth: (1) detailing trading hours and a toll free customer service number; (2) detailing new transaction charges. Introduction of K100 (\$11) flat fee on all transactions above K1,000 (\$105). Woodlands shopping centre, Lusaka. Cynthia Kamwengo

At the same time, several informants in Zambia indicated that they preferred keeping their money in a bank account as opposed to a mobile money account. The ease with which the money in the latter account could be accessed meant that those with little financial discipline found themselves using the money for alternative things. Phone credit (talktime) was the main product money was “squandered” on, according to informants. Interestingly, a FSD report on Zoonas, published in Zambia, indicates that this, in fact, is one of the main goals of MTOs—much more revenue is made selling phone credit than from money transfers.⁵⁸

While these personal sentiments about (e-)money and savings are important, we must not forget that, for some, savings and transferring (extra) cash is not even an option, as they have nothing left on a daily basis to save or send. In contrast, many informants in Senegal and Cameroon mentioned an inability to save or apply for credit via DFS as an obstacle to its use.

5.4 Synopsis: Networks of belonging

Societal hierarchies based on access to services, to the state and in relation to wealth and class are elements that influence people’s feeling of belonging to DFS. Technological interventions such as DFS are thus not neutral, but relate differently to different groups, something we also saw in the sections on Technological appropriation (III.3) and Regulatory perception (III.4). People have appropriated DFS in unexpected ways and, in fact, perhaps even unexpected groups of people—like those in the informal economy and poor family members—have adopted the technology. In a way,

⁵⁸ Byun, Jungian (2015) ‘Zoonas: A study on third party innovation in digital finance’, FSD Zambia, August 2015.

the digitalization of money transfers have a two-sided impact on society— they allow for a continuation of existing social hierarchies, but also feed into the societal tendency towards individualization, creating new opportunities for financial inclusion.

6. Economic hierarchies: DFS and financial inclusion

In this section, we further the social argument of in- and exclusion in networks of belonging to the economic differentiation. Each society has its economic hierarchies. Between individuals, for instance, these can be in terms of status related to jobs, regular income, etc. DFS will interfere in these relations and increase the distance between individuals or shrink them. There are also hierarchies between different economic systems, such as the informal and formal. This can be specified by, for instance, market women selling vegetables, who form a kind of unity in the market, or the more formal positions of people working in banks, or civil servants. Each of these groups will be affected differently by DFS. Finally, economic hierarchies play a role in the creation of jobs related to DFS. Or the way DFS help to develop a sector, as is the case for taxi drivers in Bamenda. In the following, we give examples of how DFS influences these different economic actors, and groups of actors, in terms of their position within the economic system in general. But first, we want to see how the uptake of DFS, and hence the possibility that it has to influence certain groups more than others, is also playing a role in changing these hierarchies. Our data shows that many people perceived themselves to be not high class enough to even start thinking about adopting a DFS strategy for themselves, hence excluding themselves from any possibility to profit from the services, for instance, to increase their income. Although not all individuals feel comfortable using DFS, our case study data also shows that DFS can serve as an introduction into financial services and can be used to mediate between the informal and formal economy/economic hierarchies. More precisely, DFS allow people to shift from one economic hierarchy to another. Here, we build on the analyses presented in sections III.3, III.4 and III.5 on Technological appropriation, Regulatory perception and Networks of belonging, respectively.

6.1 Historically rooted view of “upper class” banking: DFS and perceptions of “class”

The perception that banking services in general are, “made for the upper class” seems to be historically rooted. In the words of Mr. Koama, who worked as a trader in 1970s Zambia:

I know of many people who are late [have passed away] that traded and wanted to keep money safely in banks. But there was also fear of the banking system itself. If there was a bank like NATSAVE for example, you would hear that it would be in town and in first class streets. No ordinary person would be free in the first class street.—Mr. Koama, trader in the 1970s, Zambia

A similar perception of exclusion can be found today in relation to DFS:

Yes, mobile money is a good thing but it is better for people who are educated and have money. Uneducated people do not understand the technology and concepts behind sending money on the phone. Mobile money would be practical for farmers, teachers and companies operating in rural areas, but I don't think it is high on the priority list for most poor people. They are more concerned with how they can get enough money or food to eat, not where to keep their money. People in the village are especially superstitious and want to see the money in their hand.—anonymous, Zambia

In Cameroon, as well, we see a tendency to equate banks with necessary large amounts of money. Mr. John Takang Menkefor, a secondary school teacher of 52 years, living in Bamenda Town, explains why he considers banks to be elitist in their approach and in excluding the poor, rural farmers specifically. According to him, mobile money does not do this, because, by its nature, money is “made smaller”. It is a safe service and should be accessible to grass-roots farmers. He regretted that, unlike in Kenya, and some East and South African countries, where mobile money is easily accessible to

rural farmers, in Bamenda the services have remained concentrated in towns. And even in these towns, MTN and Orange money are still only timidly used, and not widely known.

Although DFS offer potential to those earning a lower income to engage in more formal/transparent financial activities, as Mr. Menkefor notes, in reality, many of the market women (*buyam sellams*) and motor taxi drivers (*bendskin drivers*) do not have the means to use DFS. Illiterate villagers who cannot read find it impossible to fill out the required forms and hence need assistance, which automatically exposes their financial issues to a third party. Our Cameroonian research team observed the following:

Several of our informants, especially the *buyam-sellams*, hawkers, and ‘Okada’ or ‘Bendskin’ riders we interviewed, stated: “Mobile money is for the rich.” These people did not deem their income sufficient enough to allow any money left to be transferred somewhere else or even to be saved. The fact that the rural outreach of DFS is so far lacking has contributed to the somewhat elitist nature of the services.— Excerpt from Cameroon’s Intermediate Fieldwork Report

In fact, existing socio-economic inequalities seem to be upheld by DFS, or might even be exacerbated by them.

Mobile money is for poor people, small entrepreneurs like marketeers and street people. You don’t find rich people with big bellies using mobile money.— anonymous, Bamenda Town

Self-employed people like marketeers fear commercial banks. They fear the charge for opening an account, monthly charges and even checking their balance. Mobile money accommodates everyone in the system, poor or rich.— anonymous, Bamenda Town

Similar tendencies can be found in Zambia where, although the majority of DFS-users own bank accounts, the unbanked are still too poor or less financially capable to save, send money or carry out transactions, even if DFS are generally more affordable. Coverage in the most remote areas is not as wide and one may find only one outlet per village, hence not widely reaching the unbanked. Can DFS be counted as a tool of financial inclusion if it doesn't reach beyond the group that already have bank accounts and if it doesn't reach substantially beyond those who are unbanked, especially those situated in the rural areas?

6.2 DFS as a tool for small entrepreneurs

DFS offers a tool for small entrepreneurs that can help to monitor business growth. They are easy to use, also for those without financial expertise, and can facilitate business transactions where traditional infrastructure is less developed. DFS provide the same services of depositing and withdrawing money as formal banks do, but without long lists of requirements, monthly charges or hidden costs.

I try to deposit K10-30 (\$1-3) from my earnings at the end of every day in my Airtel Money account. At least with mobile money, marketeers can deposit small money. Can you imagine going to a bank and trying to deposit K30? They will look at you like you are mad. I will be using mobile money for daily savings, then at the end of the month I can have the courage to take K200 (\$21) from this money and deposit it in my bank account at UBA (United Bank of Africa).—Mr. Chisha, Lusaka, Zambia

Similarly to Mr. Chisa, Ms. Muyenga, a Zambian woman active as a small-business entrepreneur in Kitwe, describes how she uses DFS to save small daily earnings, which she then transfers to her bank account, saying that she is too embarrassed to take these small amounts to the bank. One of our Zambian researchers tells us her story:

Ms. Muyenga is an entrepreneur from Kitwe, who runs a catering and events business. She has grocery stalls surrounding several hospitals and clinics on the Copperbelt. In 2015, she realized that Airtel

Money has provisions for cheap money transfers and savings. Through her Airtel Money account she was able to monitor how her fritter business grew, as she saved all the profits from the fritters she sold. In her opinion, Airtel Money is a good way to invest in small businesses. In her account she can save small amounts of money, which would be too little to deposit in a formal bank account. Ms. Muyenga's fritter business made her realize that she could use DFS for her entrepreneurial ambitions. In her opinion, DFS encourages the poor to start businesses and monitor their growth. Through DFS even those without prior technological or financial experiences can participate in the financial system.—Excerpt from the Webspaces story, “On financial inclusion and boosting fritter sales” [access forthcoming].

These examples show that DFS can be used to mediate between the informal and the formal economy, but also that they function as a means of accessing the “upper class” banking institutions referred to in the section on ‘Networks of belonging’ (III.5). Fritter sales can be boosted through DFS and can be used to stimulate entrepreneurship. Small savings can be deposited through DFS and can eventually be used as deposit in formal bank accounts. Although DFS can serve as an introduction to financial services, not all individuals feel comfortable using DFS. Perhaps the barriers to DFS use will diminish with increased usage, once DFS becomes an established part of financial transactions.

One example of how Zambians have been embracing the idea of DFS payments becoming a part of day-to-day life can be found amongst its youth. Several Lusaka youngsters have been developing a sophisticated use of DFS by setting up a payment system for waste collection services in Lusaka. Users who use this waste collection service can make their payments through DFS, which enables swift administration and a better customer experience. It appears that DFS will continue to expand its use in such unexpected and innovative ways. The portrait (visit the Webspaces for the full story, URL forthcoming) compiled by one of our Zambian researchers tells the story of T.C., a 26-year-old entrepreneur working on developing this payment system. Their aim is to make use of payment platforms provided by Airtel and MTN mobile money:

Initially, we had wanted to set-up our own mobile payment system but we were told by the banks that we would have to prove that the company operated country-wide, had a huge asset base, a lot of liquidity, and security features such as its own IT department to develop and manage software. But we found that the necessary software would cost above K18,000 (\$1.885). That is too expensive for us right now so we will use the Airtel and MTN platform.

Here, DFS provide an opportunity for entrepreneurs starting out on low budgets. At the same time, hurdles also exist when it comes to relying on mobile services for business:

There are too many network problems like how I was telling you earlier how I had problems sending money two weeks ago. I don't know what they can do, but they have to boost their network. It is a big stumbling block to business.

While DFS has numerous facilitating roles when it comes to entrepreneurial activities, those interviewed remarked that the service is still costly, especially for the poor.

6.3 DFS as a stepping stone to formal financial services

The story of Mrs. Nain, a 50-year-old Cameroonian woman, illustrates how those working in what is often referred to as the informal sector, find themselves making use of more “formal” financial institutions, such as those provided by DFS in the form of paying their monthly household bills. Throughout her lifetime, Mrs. Nain has been involved in several economic activities. When Mrs. Nain became pregnant as a schoolgirl, she lost the support of her parents, forcing her to move to Bamenda in 1985, where she was taken in by a girlfriend. With the help of this friend, she managed to complete her schooling three years later. During this period, Mrs. Nain also engaged in petty trading by roasting fish at City Chemist Round Bamenda. This enabled her to take care of her son. In the early 1990s, when multiparty politics was introduced in Cameroon and Bamenda became a

hotspot for multiparty activities, Mrs. Nain could not continue roasting fish there, so she decided to become a *buyam sellam*. She explained that this work was strenuous:

To buy, I had to get up at 4:30 am to board a car to Benakuma in Menchum division, about 69 kilometers away on very poor roads. I decided to change my business line when the mobile phone was introduced. I now run a call box, mobile money services, and supplies of stationary in some government offices.

Her leaving the *buyam sellam* business coincided with her marriage to Mr. Fousing, a driver with whom she went on to have three children. His death in a road accident in 2005 was an extra motivation for her to continue looking for new business ventures. In a portrait of her compiled by our Cameroonian researcher, Emmanuel, she explains that:

I don't need stick to one business, because if it fails me my children will suffer [...] I may even be force to park to village." She informed me that MFS are offering her formidable chances in business ventures, stressing the practical advantages: "Without MFS I would have been forced any time I am travelling to carry money along which is very risky. [...] Mobile money is a source of business to me." She explained that when she pays water bill for an individual at FCFA 5.000 (\$8) she charges an extra FCFA 250 (\$0.41), and when she transfers FCFA 10.000 (\$16) she charges an extra FCFA 500 (\$0.82). These transactions enable her to make a small profit.—Excerpt from Mrs. Nain's portrait, Intermediate Fieldwork Report Cameroon⁵⁹

Apart from providing services to customers, she also pays her utility bills through DFS. When it comes to the transfer of money for other reasons, Mrs. Nain generally uses MTOs such as Express Union, Unics PLC, and EMI for national money transfer services. She uses Express Union mostly for local money transfers. When asked, Mrs. Nain said she feels financially included as she often makes use of various financial services. She would argue that most of these are inclusive in Bamenda, referring to the fact that members of the account Credit Union Limited are treated without any discrimination or favoritism. In the offices of Express Union, EMI, and Unics PLC everybody is free to come in and transfer or receive money. Mrs. Nain did, however, warn that the very poor are excluded from DFS. As businesses, she explained, the DFS are out to make a profit and some have high change rates for money transfers.



Picture 12: Call Box Operator at Ntarikon Market, Bamenda. Emmanuel Ngang

⁵⁹ Also: see the video of Emmanuel Ngang interviewing Mrs. Nain, produced by Prof. Mirjam de Bruijn on our Webspace [forthcoming]

Similar tendencies exist in Senegal, where out of all the four countries, its financial system seems to have been the most stable and accepted. A young man working as a tailor in one of Dakar's suburbs explains how he came to his profession and how monetary transfer services play a role in maintaining his customer base. During an interview with youth in Dakar he explains the following.

The money transfer services are “*ndibél jaboot*: Support for the poorest, because they allow the non-poor to support the poorest. In these neighbourhoods, these difficult upbringings dictated our acts, and we are often called upon to review our positions along the way. For example, I was a pupil of école Baraque omar gueye diouf, and when I grew older I could no longer see my father, who struggled all the same to get breakfast, and I said I wanted to work. Over 3 years I learnt the craft of the tailor but things were difficult at first: I was sent to fetch water, sweep up, but when I looked around me, I always think tomorrow will be better. I had a machine at mine, and with ceremonies coming up. I'd work at home, and then get the workshop back, and now I'm in another workshop, it belongs to a woman, she pays me and that's how I make my living. Sometimes people send me money by Wari or Joni Joni, so I can buy them some fabric and have it sewn up.—B.M. 20 years old, tailor, single, Dakar

In a country like DRC, most people make a living by practicing an activity in the informal economy. With the decline of the craftsmanship and micro-industry, small informal trade is the most developed form of self-employment in recent years. People practicing these forms of trade often have a low and uncertain income. They rarely keep their money in banks, and generally prefer informal savings and credit systems called *tontine*. If they ever feel the need to save their money, they will also always need to have a part of their money in cash to cover ongoing economic activities. For this purpose, conventional banks do not really suit them, but DFS can provide an outcome here. One should also take into account the fact that many people who practice informal trade also do distance trade, and therefore use traditional means or phone communication services to transfer money in rural areas or to other cities.

6.4 Synopsis: Economic hierarchies

This section has shown the relationship between DFS and economic hierarchies. Such new technologies can provide a step towards financial inclusion by, for example, allowing people to save up small sums, which they then deposit in a bank. At the same time, it is these existing hierarchies that determine that an individual does not feel as if he/she belongs to a bank if he does not have a large sum of money. DFS thus builds on and continues certain economic hierarchies, while also providing small entrepreneurs with the possibility to link up to new economic systems (sectors).

IV. ANALYTICAL SUMMARY: TRUST AND CONTEXT

Throughout the country cases there are several themes that have proven crucial to understanding attitudes towards digital financial services. The four main research questions inform the themes of this report's chapters: (I) historical roots and context; (II) the mobile money ecosystem, and (III) perceptions and attitudes. In this last section of the report, we reflect further on these questions, guided by the empirical realities that we found on the ground and touching upon the relationship between DFS and financial inclusion.

In the ordering of our material we have used six themes: (1) Historical roots of monetary transactions; (2) Mobility today; (3) Technological appropriation; (4) Regulatory perception; (5) Networks of belonging; and (6) Economic hierarchies. These have guided our presentation of the ethnographic findings. In our theoretical guidance we presented the ecosystem approach, encompassing the ideas of mobility, new connectivities and context. What we have not yet mentioned is the notion of trust and dis/mistrust. It is interesting that this notion has been very central in the citations and encounters with our informants in all the sub-themes we treated. In comparing cases and people's attitudes, we would like to reiterate the role of context. It is clear that the social, political and historical context in which the DFS services land do steer and inform the way people adopt them. But what is probably more important is that our findings indicate that this question of context goes even further, to the individual/social group level. The comparison that this allows us to finally make is between the ways people are positioned in society and how this position allows them to interact with the DFS system. The notion of hierarchies has been very useful here. Trust and context—cultural, socio-economic and political, at the state/region level, and differences between informants' position in society— seem to be the main factors defining differences in uptake between the four countries, and between social groups within their regions.

1. Understanding the mobile money ecosystem as context

Mobile money is a term given to certain DFS services by the people in Cameroon. We suggest here that this is relevant and we have linked it to mobile societies/communities. As all the case studies show, DFS are part of mobile money ecosystems that have an important mobility factor, both for people and for economic flows. Distance between family members and between economic operators are crucial to economic daily life. Local farmers have become part of a global economic system, or at least of a regional system. The flow of money, then, becomes crucial. As we have seen in the case studies, the roots of these local-regional-global relationships are literally part of a history of mobility of people—either because of a mining or plantation economy, or due to international migration economies—linked to a mobility/flow of money. This historical context of mobility has helped to determine how modern-day mobile money services integrate into these existing systems. Our findings show that users come from all levels of the economy and certainly not only from the middle classes. Hence, we can conclude that digital financial services are part of an ecosystem in which all forms of mobility, across different social and economic hierarchies, have a long history. DFS technology is a logical fit into this system.

KQ1: What makes up the infrastructure of DFS in SSA?

KQ2: How is the “meaning of money” changing in the context of digitalization?

The mapping and understanding of this ecosystem was one of the goals of this research project. The data our researchers collected shows how many perceptions on and attitudes to (trust) aspects of the financial ecosystem are historically rooted. The historical mobility of people, and with them money, is one such aspect. People have been used to sending and receiving money over distances, with DFS now (theoretically) providing an easier and safer way to do so. Here, the necessity to move money without government support or a well-functioning formal infrastructure have resulted in the existence and relative popularity of alternative monetary systems, such as *njangi*, credit unions and *tontines* (Cameroon and Senegal), and help explain part of the success of DFS uptake amongst the informal sector in DRC.

The socio-economic and political contexts of each of the countries' mobile money ecosystems are important in understanding, for example, why some Zambians tend to perceive banks as being for the rich—the dual economy of copper mining and labour migration to South Africa coupled with a recent economic crisis mean that, where previously, such monetary transfer institutions as those provided by the post offices and later by banks were mostly used by elites, the relative trust people used to have in state-backed financial institutions is slowly weaning and people are finding themselves without enough money to get by, let alone save or transfer through DFS. Across the four countries, we see a strong difference in usage patterns when it comes to the formal and informal sectors. While alternative money transfer/saving schemes appear to have a big influence, as does the marketing approach of DFS providers, these do not provide sufficient explanation. We also need to bring the status of communication infrastructures and the (historical) role of the state and bank defaults into the equation. It seems that in some countries an economy of bricolage, such as that in DRC, lends itself more to successful DFS uptake than in, say, Cameroon, where the need is not as great. In DRC, DFS have not come to replace existing systems of trust, like they have in Cameroon (*njangi* and credit unions), but are instead perhaps one of the first systems people can rely on.

The mobile money ecosystem is also marked by visual elements like advertisements, mobile money booths, simple shop advertisements, the colours of the companies, and the different types of small jobs that have come with it. In general, we can conclude that this is a mobile money landscape that appeals to many people, except for the advertisements on billboards, which were criticized for being undecipherable. However, smaller advertisements with explanations of how to use DFS are a more interesting tool, as they deal with skills. The skill part is, of course, not visible in the ecosystem, but very much a part of it. We discovered that, in terms of skills, there is no real systematic attention. It is interesting how shop owners become teachers of these skills. It will take some time before the people that are, on the whole, not very digitally literate, will understand all the workings of mobile money. And, as we remarked, these also influence how people perceive and trust the system, which we will discuss in the next section.

2. Trust and DFS uptake

So what role does (mis/dis)trust play in the decisions people make when it comes to DFS uptake? Our findings show that trust means different things: it plays at different institutional or, if you wish, organizational levels (state, but also family, social groups), and it has a clear link with individual histories and experiences. In fact, in the interviews, the lack of trust, dis/mistrust is prominent. Of

course, trust is at the basis of any economic system, but here we have tried to decipher how this plays a role in individuals' decision making vis-à-vis the use of DFS.

An important role in this is played by the history of banking in the countries. The loss of money due to institutional failing is an important factor in the lack of trust. As we have seen in DRC and Cameroon especially, the historic failures of the banking system, with people suffering monetary losses, are still in the people's memory. In Zambia, the state has been relatively successful in moments of (historic) economic turmoil, contributing to at least a part of the population feeling secure in investing their money in a state-owned bank. The majority of the population, however, feel that banks and similar institutions are one step too far for them to engage with. The interesting thing here is that those who place their trust in banks often will also only place their trust in other state-backed financial institutions, feeling that their interests will at least be protected by the state. It is not so black and white, however. Interestingly, DFS services do introduce people who would not go to a bank to the financial literacy of saving: While some low-income earners do not feel they can use a bank due to a lack of sufficient funding, they do see the benefits of saving their daily income with a DFS savings product, with the possibility to then deposit a large-enough sum into a bank account.

In this report, we have emphasized from the outset that economic attitudes and actions have to be understood in the context of society and history. Our findings confirm that, for the understanding of institutional embeddedness, we have to search beyond the state and, indeed, the Cameroonian case is very clear in the suggestion that social and historically formed groups receive strong trust from the people. *Njangis* are exemplary. Such structures exist in any society and to understand the DFS uptake it is important to understand these trust networks, in which economic transactions are in fact the core of the social relations. Here, we note, too, that our study has shown that there has not necessarily been an abstraction of money with its digitalization. Instead, we have seen that people still consider it as “a material good”—money needs a secure channel in order to arrive at its destination and is not confined to anybody in particular. Hence, also in monetary transactions via DFS, people prefer the circles they know, the social units they trust. The example of credit unions in Cameroon highlights this in its extremes, as do the *njangis* (also Cameroon) and *tontines* (Senegal).

Related to this institutional trust question is certainly that of digital literacy, understanding the “safety” of the transactions. Here, we have given ample examples in section III.3 that such literacy still needs further development and, in a way, we are only at the beginning of the embeddedness of mobile money in the daily economic life of people (especially in DRC and Cameroon, but also in the more formal economies of Senegal and Zambia). This is also related to information and the availability of information at the level of the users. Here, we enter into another important element of the construction of trust: the perceptions of DFS by (non-)users.

Empirical data thus points to the level of consumer knowledge when interpreting perceptions of DFS regulations and their consequences for potential users, but also very much to personal experiences. Those users who have lost money in transfer—whether due to scams, theft by the agent, network errors or a misunderstanding of fees—share these experiences with others. The researchers in DRC noted that this, in fact, is one of the reasons non-users do not start using the services: they have heard too many negative stories.

KQ2: How is the “meaning of money” changing in the context of digitalization?

KQ3: What are the factors informing people's perceptions and attitudes to DFS?

Money becomes more than just a commodity or capital. The personal relationship and social security it can bring is equally important, something that some informants feel is missing from products provided by DFS and banks. This, then, brings us to the social aspect interlinked with the issue of financial inclusion.

3. (Digital) financial inclusion and social inclusion: The impact of DFS

As highlighted in chapter I.1, the term digital financial services covers “[...] financial products and services, including payments, transfers, savings, credit, insurance, securities, financial planning and account statements. They are delivered via digital/electronic technology such as e-money (initiated either online or on a mobile phone), payment cards and regular bank accounts.”⁶⁰ Digital financial inclusion,⁶¹ then, “[...] refers broadly to the use of digital financial services to advance financial inclusion. It involves the deployment of digital means to reach financially excluded and underserved populations with a range of formal financial services suited to their needs, delivered responsibly at a cost affordable to customers and sustainable for providers.”

KQ4: What is the impact of DFS on financial inclusion?

In theory, access to the usage of digital financial services promotes financial inclusion. In practice, this depends on what definition of financial inclusion one upholds,⁶² but perhaps even more to people’s *feelings* of belonging—of being included or rather, excluded, from socio-economic life and of belonging, for example, to the new modern “Tigo Cash family”. Our findings show that financial inclusion can also be linked to forms of social inclusion. It might be that a “feeling” of being socially included aids in taking steps towards accepting financial inclusion.

Having examined the ways in which people handle money across all four of the research countries, our results show that money is closely linked to feelings of security, trust and the social. These, in turn, tie in to experience and financial literacy. The exact same tendencies can be discerned in relation to DFS. People make use of the systems and networks available to them, whether they be formally or informally embedded into the existing economy. Whether the process of sending money to a relative goes through a local merchant, the bus system, a transnational MTO or via Orange Money, the result is the same: money ends up in the hands of the recipient and is re-introduced into the economy (i.e. through the payment of school fees, a medical bill, the purchase of goods, etc.). Are the people involved, then, not financially participating in an economy built on and revolving around formal and informal networks? Is the difference between formal and informal financial inclusion different for the user? Perhaps it is, not least in terms of security. Then again, the stories of our informants have shown that even sending money through formal exchanges, such as DFS, does not necessarily guarantee consumer protection or avoid fraudulent practices. While some of these cases may be linked to a lack of knowledge and/or enforcement of consumer rights, they do inform people’s perceptions of the service in general. The appropriation of DFS involves a learning process, a process that will take time for people to become accustomed to.

⁶⁰ ‘G20 High-Level Principles for Digital Financial Inclusion’, 2016 GPFI Report, p. 3.

⁶¹ ‘G20 High-Level Principles for Digital Financial Inclusion’, 2016 GPFI Report.

⁶² We do not counter the definition of financial inclusion given within the development sector, which links the concept to formal financial systems. Instead, we also consider the more informal financial channels as important methods of transacting.

What, then, is the role of DFS when it comes to financial inclusion? To a certain extent, (potential) DFS users are still restricted by national financial regulations, consequently, excluding a certain segment of the population. This is something we show under the section on Networks of belonging (III.5). A system of trust needs to be introduced for people to be convinced to participate in DFS. At the same time, there needs to be concrete benefits to using DFS. These benefits are not yet seen by many people, which touches upon the difference between the DFS value proposition and its realization. There are, of course, plenty of success stories. DFS is seen to add value to people's lives when we look at the different user groups and their social and economic positioning (hierarchies) involved (III.5 & III.6). The popularity of DFS amongst Kinshasa's informal economy is a surprising example of how DFS are providing a step towards financial inclusion. The story of the woman selling fritters and using DFS to accumulate savings, which became large enough to deposit at a bank, is another example. In Senegal, too, it was interesting to see how DFS have integrated into the existing social practice of leaving money with a local shopkeeper, using the amount as credit at the shop, or the shopkeeper as credit when income is low. This and other examples show how DFS are employed in daily life and not only for the paying of bills or student fees. The flip-side of the coin has also been mentioned: With DFS building on existing social patterns comes a feeling of social constraint and expectations to send money whenever.

4. Conclusion

In this chapter, we have described the factors that explain the differences in uptake/financial inclusion, showing how these can lead to a different form of economy—DFS introduce new hierarchies, while at the same time function as a type of social glue.⁶³ We will now briefly revisit the key research questions in order to draw some conclusions.

4.1 What makes up the infrastructure of DFS in SSA?

As described in chapter II, the chain of actors depends on the type of service, on the partnership involved and on the regulations in place, but can briefly be described as including: regulators - main banks - MNOs/MTOs/other - the DFS providers - agents - and end-users, i.e. both senders and receivers. From a user perspective, perceptions of each of the actors in this chain has the potential to influence DFS uptake. Linked to this is the level of formal banking and the type of regulatory framework in place. In DRC, formal banking systems are not heavily used and an enabling regulatory framework has helped DFS providers to profit from this by providing consumers with an alternative. In Zambia and Senegal, formal banking systems are fairly established and used by certain sectors of the population, yet DFS regulation is not optimal. In Cameroon, where MFI's are often more popular than banks, regulations prohibit the former issuing e-money and thus engaging with DFS. The level of formal banking, coupled with a certain regulatory framework, influence the number and format of actual DFS products available, as well as the level of consumer protection in place. Where DFS do not provide the outcome consumers may want, people turn to alternative systems of money transfer. These systems are often well-established and include *njangi* and *tontines*, credit unions, merchants or transport companies and the postal service.

4.2 How is the "meaning of money" changing in the context of digitalization?

This question is linked to how new technologies such as DFS enter society. We have shown how there is a continuity in money transfer systems, from the simple money transfer by bus to the new digital forms. The difference is, of course, the speed; but, as we have shown in the discussion, our data show that these advantages are not enjoyed by everybody and factors of trust must be taken into consideration. Another continuity that we have shown is the role of mobility in society and how this is related to the transfer of money and its history. The way DFS enters into society is layered. Some

⁶³ Vertovec, S. (2004) 'Cheap Calls: The social glue of migrant transnationalism', *Global Networks* 4:219-224.

people accept it easily and others are reluctant; it has to do with skills, knowledge and access and also with family relations and, once again, the issue of trust is influential in this regard. In general, DFS increase the speed and distance at which money can flow through the economy, but, as such, they do not change the basic conceptualization of economic transactions. The fact that money can be transferred digitally does not yet influence existing modes of access to wealth.

4.3. What is the impact of DFS on financial inclusion?

The answers to this key question can be found above (V.3). Further research would benefit from examining when (and how) people feel “financially included”. People are deemed to be financially included when they have access to formal services; whether they deem themselves to be is not really considered. A separate research might ask those who are transitional and whether their identity or self-assessment shifts from being excluded to included.

4.4. What are the factors informing people’s perception and attitude to DFS?

As per the above (V.2), the factors that inform people’s perception and attitudes to DFS include context (history, economy, hierarchies, etc.) and trust. In conclusion, the appropriation and successful uptake of DFS are not merely a technological story. DFS function within an existing ecosystem in which not only financial, but also social and cultural tendencies, such as those embodied by personal sentiments and experiences, inform (non-)appropriation.

We cannot isolate DFS from other forms of economic transfers, from the history of money and money flows, or from the multiple “infrastructures”, both formal and informal, in the regions where DFS operate. It is clear from our study that DFS are appropriated by people in this system. Their reasons for dealing with DFS are linked to immediate economic needs, but they are embedded in historical and socio-economic contexts that form the mobile money ecosystem. A specific element that is added to the ecosystem by DFS is the speed, distance and also the abstraction of money. These are factors that feed into the perception of people about their possibilities to relate to digital money transfers.

V. Concluding observations⁶⁴

The emphasis of this research project has been the ethnographic study of user perceptions and attitudes to DFS in Cameroon, DRC, Senegal and Zambia. While the formulation of concrete business recommendations to improve DFS uptake are not our area of expertise, we can make a few general suggestions on which policymakers and stakeholders can build.

1. Country-level observations

In anglophone Cameroon, we see that the long history of mobility, of people and money, within a specific socio-economic and political context pre-dates and informs the current need for and uptake of DFS. People are familiar with sending and receiving money over distances and are comfortable with the methods they have been using for years. Credit Unions and *njangi* are amongst the most popular means of dealing with money regionally and nationally—providing credit, savings and transfer possibilities. MTOs are popular when it comes to both national and international transfers. At the same time, there is a need and willingness to make use of DFS, yet the outreach is still lacking, especially in rural areas. Many informants find the service expensive and those working as agents complain that they cannot make enough profit to keep providing the service. Network-related issues are common and consumer protection is either not enforced or known. Informants would like to have the possibility to apply for credit through DFS, something which they can do (and often rely on heavily) via their credit unions and *njangi*.

Besides the mentioned issues, two particular problems appear to prevent the uptake and usage of DFS in Cameroon: 1) missing personal relations and 2) lack of consumer protection. Personal relations appear to be of utmost importance when doing financial transactions in Cameroon which is reflected by the large-scale presence of *njangi* groups. However, this personal relation (and the connected) trust seems to be absent in DFS. Thus, MNOs should put a great emphasis on both training and right remuneration of their agents. They are the main representatives of the MNO and should be well-trained, trustworthy and happy with their engagement as an agent. This could significantly improve the usage of DFS in a country like Cameroon where personal relations seem to play an important role when transacting. Moreover, awareness raising campaigns could be an effective strategy to showcase that mobile money is beneficial for people even with small incomes. In addition, missing consumer protection seems to foster distrust in DFS providers undermining the acceptance and usage rates. The implementation of the right legal rules while offering customers direction for complaints could improve the situation. However, these improvements would have to be well communicated to clients.

Of all four countries, it seems that DFS have been adopted most quickly by DRC's informal sector. DFS provide much-needed services, although many rural areas are yet to be connected. Amongst informants, the cap on transaction amounts is perceived as a handicap. It is possible to increase the cap of an account in a shop, but this takes time, with queues putting users off. An anonymous informant proposes, “[t]o overcome these handicaps, we need a union to defend the rights of small users (under \$100). These networks steal money from us, and as the amounts are minimal we don't know who to complain to.” His remark touches upon issues of consumer protection and the related enforcement of regulations. In an environment of missing regulation, distrust in political and formal financial institutions, DFS providers are best advised to promote themselves as ‘different’ to these established but distrusted institutions. MNOs should focus on clients in the informal, low-income sector when considering advertisements while putting emphasis on improving the protection of consumer. Especially, the separation between two different kinds of DFS accounts with differing levels of consumer protection appear to foster distrust of DFS.

⁶⁴ In partnership with IFC.

Senegal has an established financial system, both formal and informal. Informants are generally at ease and knowledgeable when it comes to formal financial institutions. At the same time, perceptions of these institutions as being too expensive or unreliable mean that many will take out the salaries deposited at a bank and invest them in local credit-issuing *tontines*. DFS are fairly widespread, although here, too, the rural outreach could be improved. Money Transfer Operators (MTOs) such as *Wari* or *Joni Joni* enjoy a wide popularity among the Senegalese due to their simplicity, speed, low-costs and availability all over the country. In contrast, uptake and usage of DFS connected to a mobile wallet (*Orange Money* or *Tigo Cash*) are small. A main problem seems to be low levels of general and financial literacy, especially among the female population. MTOs offer very simple OTC cash transfer where the user does not have to deal with any complicated menu interfaces. Thus, DFS providers are advised to focus on customer trainings by agents or other representatives, in particular in rural areas. Very recently, *Wari* and *Tigo* Senegal merged which could have a great impact on financial inclusion due to the combination of the benefits of wallet-based DFS with a highly popular money transfer service.

In Zambia, another country with an established formal financial systems, our findings report that current marketing campaigns are not perceived as being very effective. Respondents think that more sales agents should be employed to personally explain to potential customers what the benefits of DFS are. Middle-income customers, such as urban youth, indicate that they would make more use of mobile money if it could be used to pay for concert tickets, or if mobile money could be used to make payments in shops. Another Zambian informant sees possibilities in more local radio stations partnering with MNOs, as Airtel Money and Hot FM did during their Bus Drivers Challenge in the summer of 2015.⁶⁵ In general, social exclusion appears to be among the main reasons why people are hesitating to use DFS in Zambia. Advertisements create the impression that DFS is only made for the educated and rich parts of the economy. If MNOs want to reach people active in the informal sector, they should adapt their marketing campaigns towards these potential customers. Moreover, similarly to Cameroon and DRC, informants mentioned that a lack of regulation and consumer protection is holding them back from using DFS. Zambia appears to have the right environment for a flourishing DFS sector with a history of labor migration and connected mobility of money but wrong advertisements and missing consumer protection appear to hinder the growth of DFS.

⁶⁵ “From May to July 2015, Hot FM ran a Bus Drivers challenge and then expanded the Challenge to include general drivers in August. In its initial stage the winning prize was a full daily cashing for a bus driver or we would pay for vehicle servicing or pay bus fares for all passengers on board the bus. The aim of the Challenge was to empower the listener, celebrating Hot FM’s 10 year anniversary and was a marketing tool. The radio station provided money for the prizes in the first stage but from October to December we introduced a new Drivers Challenge in partnership with Airtel Money. The radio station had approached Airtel because we noticed they were trying to expand their customer base. Prerequisite for driver to win money in this Challenge was that they had to have an active mobile money account. Drivers had to: (1) Tune into Hot FM and have a Drivers Challenge bumper sticker on their vehicle; (2) Radio station employees (spotters) would spot vehicle and call in and give description of vehicle; (3) Driver would indicate that they had heard their details being announced by flashing their lights and stopping at side of road; (4) Kwacha equivalent of US\$100 prize would be transferred to drivers Airtel money account if they had an active account. The idea was to increase knowledge about, activation and usage of Airtel Money. Lots of people have Airtel numbers but only a few have activated Airtel money. People responded well to the competition. Number of people activating Airtel money accounts increased. The Challenge also helped the radio station get more listeners. If someone wanted to win they had had to tune in whenever they were driving so listeners were tuning in for longer periods of time. We found that out of every 10 vehicles driving around Lusaka at least 6 or 7 had bumper stickers which meant people were listening. We saw an increase in the number of our advertisers and revenue since we had more listeners”. (From: Zambia March Report)

2. General observations

As the analysis in section IV sketches, trust in the state structure is important in understanding and thus also influencing DFS uptake amongst the population. The key question that remains is how people develop this trust? Whereas in DRC potential users are distrustful of formal financial institutions and services, in Zambia these are preferred. Within each country case, the context of (in)security varies and require different approaches.

There is still much illiteracy, both technical and financial, in all four of the countries. The skills to work with DFS are missing, as is (access to) information on them. Advertisements are one way to reach potential users, yet need to be geared to other sectors of the population and not only the middle class. They need to be in the local language (Zambia) and improvements can be made regarding their outreach in rural areas (Cameroon). Informants also indicated that advertisements were not always clear in indicating who the target population for DFS are (Zambia) and how the service was to be used (DRC). The state, (mobile phone) companies and financial institutions could do more to ensure transparency of their services as well as establishing clear rules vis-a-vis transactions. In addition, many informants look to advertisements for an explanation of how DFS work, instead of their local DFS agent. Following a FGD in Kinshasa, participants suggested advertisements show the possibility of withdrawing cash at ATMs instead of only at counters of shops with queuing problems.

Well-known issues related to floats and network issues, where people lose their money, are found across all four countries. Because DFS are still a relatively new service, single bad experiences can damage the reputation of the provider as a whole. Another interesting, yet perhaps not surprising find is that the technological gap in terms of electricity and MNO networks is still very present. This means that large regions are still disconnected, an issue that needs to be tackled and which explains the relative slow-uptake of DFS in Cameroon and the popularity of alternative systems—there simply are no DFS for people to link up to.

Within all four of the societies, much is still organized according to social/community dynamics, which involve a different type of ‘ordering’. Our findings show increasing elements of DFS being integrated into these alternative systems, forcing people to deal with money differently. At the same time, there is still room for growth. In order to attract more people to use DFS, MNOs are encouraged to constantly increase their product range by innovative products. In particular, loans and savings products would be well appreciated as mentioned by various informants. These innovations are currently introduced to more and more markets in Sub-Saharan Africa and could push growth of DFS in this region in the long term.

Our findings show that DFS can be used to mediate between the informal and the formal economy. Sales can be boosted through DFS and can be used to stimulate entrepreneurship. Small savings can be deposited through DFS and can eventually be used to deposit in formal bank accounts. DFS can serve as an introduction to financial services, but not all individuals feel comfortable with using DFS. Perhaps the barriers to DFS use will diminish with increased usage, once DFS becomes an established part of financial transactions.

Another opportunity for the further development of DFS lies in the fairly positive impact it has had on employment rates. Across the four countries, the business of being or becoming an DFS agent is booming. In Zambia, students and youth in general are seen entering the business as tellers or agents in their own right, as a means of making an income. In Cameroon as well, men and women offer DFS as a means to complement their existing businesses, although several Cameroonian informants indicated that profits are marginal.

Overall, we would like to posit that the mobile economy as an underlying and historical understanding needs to be incorporated into the setting up of DFS. Such an approach helps in understanding and interpreting the ecosystem in which DFS are introduced, as well as identifying the variety of potential

DFS users. Our findings show that DFS are interesting to a larger sector of the population than perhaps initially targeted, namely those working in the informal sector as well as the ordinary man or woman wanting to transmit or receive small amounts of money.

3. A note on the research themes

This ethnographic study has introduced the use of a framework with which to understand motivations as well as challenges and obstacles for DFS uptake. This framework, comprising of six themes, has emerged out of the stories of informants and might be used as a tool for further (market) research or focus groups carried out by DFS providers. As already explained in detail in previous parts of the report, these six themes allow us to understand the society and ecosystem in which DFS are introduced. What then, are the most important components informing each of the themes?

An analysis of (1) the historical roots of monetary transactions, surfaces such issues as trust, a personal connection and communications as being (historically) important to people when they move(d) money. Here we see that the historical role of the state in relation to financial practices has had, and still has for that matter, an impact on the way people deal with money. In addition, the availability or lack of, well-oiled alternative systems needs to be taken into account. Understanding the (2) mobility [of money and people] today, helps paint a picture of *who* is sending and receiving money and what they find important when doing so. Money is moved primarily out of necessity, a necessity which is linked to infrastructures in place, the level of government support, commerce and daily expenses. The mobility of people, both internationally, domestically and regionally of course also factors in, as do the role of social networks and expectations. These first two themes provide a context with which to interpret people's perceptions of DFS's technological and regulatory aspects. In terms of (3) technological appropriation, the uptake of DFS is strongly linked to experiences with the technological side of services. We found that (financial) illiteracy, ease of use and a general mistrust of financial institutions (lack of know-how and transparency) were amongst the most-cited obstacles. Advertisements are seen playing a role in creating feelings of social exclusion as people do not relate to the images and messages they communicate. The focus on (4) regulatory perceptions show how a lack of transparency, a lack of consumer protection and the non-enforcement of regulations cause people to distrust DFS. Tailoring products more to the needs of *all* customers would include protecting 'small' senders. Apart from these more 'practical' issues, looking at social and economic hierarchies has provided insight into issues of why people do or do not feel they 'belong' to such new technologies as DFS. By looking at (5) networks of belonging we found that social exclusion and financial exclusion are strongly linked. In addition, technologies such as DFS relate differently to different groups of people, creating potential for some and excluding others. Understanding the variety of potential customers is key. This is emphasised when analysing the aspect of (6) economic hierarchies in relation to DFS. In many cases, existing hierarchies can determine that an individual does or does not belong to certain financial service providers. At the same time, DFS can be a stepping stone towards financial inclusion.

The above summary has given an overview of the different elements involved. As this report has shown, within each country's specific context, individual's relate differently to different aspects of each of the six themes. This thematic approach recognises that each country context, or even individual context, could see one theme being a driver for use in one context, or a barrier for use in another. This is a framework that should be applied by ensuring these elements are considered as a means for a broad, complete view of DFS, and where individual assessments need to weigh and value the elements. It offers a structure for comparison along these dimensions, as well as a means to establish commonalities and directional differences across the themes. In short, it provides a framework with which to understand the ecosystems in which DFS are introduced, as well as the variety of people involved with them.

ANNEX

1. Research Team

The Netherlands

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1. Dr. Marja Hinfelaar, SAIPAR (senior researcher & Team leader, Lusaka case study and overall supervision, provided the context of the study, specifically historically)
2. Caesar Cheelo, SAIPAR & Zambia Institute for Policy Analysis and Research (senior researcher, assisted with the background information and analysis regarding the mobile money “landscape”, “infrastructure” and regulatory framework)
3. Edna Kabala-Litana, Copperbelt University & SAIPAR (junior researcher, Kitwe case study)
4. Cynthia Kamwengo, SAIPAR (junior researcher, Lusaka case study)
5. Dr. Iva Peša, ASCL & Centre for Frugal Innovation in Africa (mid-level researcher, assisted from afar in peer reviewing the case studies, analyzing the outcomes and writing the reports, and conducted preliminary fieldwork in Kitwe)