Making the Journey from Cash to Electronic Payments:

A Toolkit for USAID Implementing Partners and Development Organizations
The Journey from Cash to Electronic Payments

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"Making the Journey from Cash to Electronic Payments: A Toolkit for USAID Implementing Partners and Development Organizations" emerged from collaboration between USAID’s Global Development Lab and NetHope. It was authored by Hamilton McNutt, Shelley Spencer, and Marcella Willis from NetHope. Substantial input was provided by Nandini Hanhareswara, Naomi Logan, Kay McGowan and Paul Khalil Nelson from the Digital Development team at USAID. Feedback on the framework was provided by our peers in the industry including Shalee Aldinofi (FHI 360), Nathan Barthel (CRS), Jaclyn Carlsen (DAI), Lauren Good (MEDA), Nick Lesher (Open Revolution), Chnissy Martin (Zoona), Neil Mendieta (JSI), Carrie Miller (CRS), Jill Moorehead (Mercy Corps), Sara Murray (Mercy Corps), Steve Perry (CRS), Kokoevi Sossouvi (Independent), Jordan Weinstock (Open Revolution), Josh Woodward (FHI 360), and Jamie Zimmerman (BFA). Finally, the design and look was created by FHI 360’s design team.

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Foreword from the Administrator

Access to finance remains among the most common and most intractable of development challenges, stifling enterprise and undermining the ability of families to lift themselves out of extreme poverty. Excluded by the formal financial systems, those at the base of the economic pyramid live almost entirely in a cash economy, without access to saving accounts to help pay for school fees or loans to grow their business. These barriers constrain progress in nearly every part of development—from education to health to growing more and better food. By enabling the 2.5 billion unbanked people worldwide access safe, affordable financial tools, we can help provide a means of escape from the financial traps that keep far too many in extreme poverty.

The remarkable proliferation of mobile phone networks across the developing world—coupled with a subtle but radical re-imagination of the business model behind financial services—presents a powerful opportunity to advance financial inclusion and build new market systems. Electronic payments systems that leverage the broad reach of mobile networks—especially among the rural poor—form the foundation of an increasing array of digital financial services. A growing body of evidence demonstrates that e-payment services, such as mobile money, not only make financial transactions more affordable, efficient, and transparent, but also build the capacity of individuals to power their own financial future.

These findings have significant implications for us as a development community. USAID is committed to accelerating the growth of inclusive electronic payment systems around the world. Collaboration with you is critical to delivering results on a meaningful scale. This Toolkit enables us to collectively improve the way we do business, by replacing the use of cash with inclusive electronic payment methods and driving the growth of these essential services.

This resource, co-created by USAID and NetHope, was inspired and informed by our shared experiences in the field. We welcome feedback as we learn together how to best embrace and advance President Obama’s vision of ending extreme poverty in the next two decades.

Rajiv J. Shah
Administrator, U.S. Agency for International Development
Introduction

Electronic Payments Toolkit:
Relief and development organizations regularly make high volumes of small payments for programs and operations. There is an opportunity to expand financial inclusion and generate benefits for people living at the base of the pyramid by shifting from cash payments to electronic payments.

For the payment recipient (program participant, beneficiary, staff or vendor), the benefits of receiving payments through an electronic (or digital) system are multiple. The obvious benefits are improved security that comes from not carrying sums of cash and the convenience that comes from reduced travel and wait times to collect payments. However, the greater benefits come from the introduction to a new payment system that provides a foundation for access to a wider range of financial services and value added business services. For many at the base of the pyramid this can mean the first opportunity to access a bank account with savings, loans, insurance, and basic money management tools; or access pay-as-you-go business services for energy, water, education, etc. For the organization making the payments, transitioning to electronic payments (e-payment) can ease the work of finance and program staff in their efforts to disburse a variety of payments to staff, suppliers, program beneficiaries, and/or clients. It can also lead to multiple benefits including improved security and transparency, reduction of leakage or waste, and improved cost and efficiencies.

Given the extensive range of potential benefits from using e-payments, donors are strongly promoting the transition away from cash. USAID is a leading supporter of this transition as a founding member of the Better Than Cash Alliance (BTCA)\(^1\) which promotes greater use of e-payments by governments, the private sector, and development organizations.

In addition to these efforts, USAID promotes the use of e-payments through support to development organizations,

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\(^1\)The Better Than Cash Alliance (BTCA) provides expertise and resources to make the transition from cash to electronic payments in order to strengthen institutions, empower people, and grow emerging economies (http://betterthancash.org/ and http://youtube/n3Uic2lXYM).

“The reason we at USAID are pushing so hard to build out these electronic payment systems is to create the ‘economic rails’ that provide a foundation for dramatically and rapidly expanding financial inclusion, and make possible new financial models to support enterprise and service delivery at the base of the pyramid.”

– Kay McGowan, Digital Finance Team Lead for USAID
and it is adjusting its procurement language in its Requests for Proposals to require implementing partners assess the potential use of electronic payments in their programs and operations.

This Toolkit is designed to support these efforts and was created by the United States Agency for International Development’s (USAID) Global Development Lab and NetHope’s Payment Innovations Project to assist relief and development organizations in making the journey from using cash payments to e-payments wherever possible. USAID, with FHI360, has also produced a Digital Financial Services for Development Handbook as a comprehensive resource for Agency personnel to support the growth of both e-payment systems and the broader sector.

According to the Better Than Cash Alliance, “shifting these payments from cash to electronic has the potential to improve the livelihoods of low-income people by advancing financial inclusion and enabling people to build savings while giving governments, the development community and the private sector a more efficient, transparent and often safer means of disbursing payments.”

**How to Use the Toolkit:**

This Toolkit aggregates lessons learned from organizations, illustrated by examples from both early champions of this movement as well as others who only recently embarked on this journey. It is designed to be used by organizations regardless of their experience with e-payments and to inspire and enable organizations new to e-payments to consider making the switch. The Toolkit is intended to be a practical “how-to” guide divided into step-by-step modules. It borrows from the multitude of relevant resources available, but we selected and recommend just a few key tools and resources at each step as a guide. The Toolkit has three sections in which you’ll find ten steps.

In the reading lists included in the steps you will find hyperlinks to the resources, and an appendix along with their respective weblinks.

**Section One: Introduction**

This explains briefly why e-payments are critical to our shared development goals and what the transition away from cash would mean for your organization and recipients.

**Section Two: Analysis**

This is divided into internal analysis of your organization’s readiness to transition and external analysis of the market’s readiness. The steps within this section are not strictly sequential and may be implemented simultaneously.

**Section Three: Implementation**

This includes a more sequential series of steps that your organization would follow to pilot, refine, roll out, and scale up the use of electronic methods for payment streams.

Within organizations, the Toolkit is useful for staff who are involved in or who have a stake in the processing of payment streams for operations or programs. Typically, this involves finance staff both in the field and at the head-office, internal audit staff, and program staff who are managing programs where payment streams flow to program participants. Depending on the organization, it may also be useful for legal, procurement, or contracts staff who negotiate with service providers. Finally, the Toolkit is useful for senior leadership who have a stake in implementing any change management within the organization. Though many issues covered in the Toolkit are specific to a certain step, you will notice certain
themes throughout the journey from cash to e-payment systems:

- **User-centric design:**
  The perspective of the end-user, or recipient of the payment, should be kept at the center when designing new payment systems. Understanding their needs, capabilities, and context are important to the successful adoption of new payment systems.

- **Behavioral and organizational change:**
  For your organization’s transition to a new payment system, formulate a change management strategy that is thoughtful, measured, transparent, and iterative.

- **Endorsement and championship:**
  Strong leadership is necessary to motivate and champion the acceptance of a new payment system by staff and recipients.

- **Risk management:**
  Throughout the process, account for operational, financial, legal, and technological risks and have a plan for mitigating those risks.\(^3\)

- **Data management:**
  New payment systems involve collection of recipient data that may require new process flows and involve data storage and privacy issues.

- **Knowledge management:**
  Often the most useful guidance can be obtained from colleagues and peers within an organization that has already transitioned to e-payments in one program or country. Actively seek out and disseminate these insights throughout your organization.

The U.S. Global Development Lab and the NetHope Payment Innovations Project aim to make this journey easier and smoother for you by regularly updating this Toolkit, drawing from lessons learned and experiences of organizations that are paving the way. Recognizing that this field is evolving rapidly, we welcome feedback, input, and shared resources from you so we can improve the Toolkit at: paymentinnovations@nethope.org
The Journey from Cash to Electronic Payments

Many organizations that provide relief and development services disburse large volumes of low value payments in their programs and daily operations. Frequently, these payments are made in cash or by check. Increasingly, organizations are using electronic payment (e-payment) systems to deliver payments by various means: electronic fund transfers (EFTs), prepaid and smart cards, e-vouchers, and mobile money. This Toolkit gives organizations like yours information on how to transition from cash to e-payments. While USAID does not endorse a particular e-payment technology, it is clear that systems that share the following characteristics will make the most powerful contribution to development beyond efficiency gains for your organization: (1) broad reach across demographic groups and socio-economic strata; (2) electronic/digital transmission and data capture; (3) the ability for individuals to

Step 1
Exploring Mobile Money and Other Electronic Payments

KEY QUESTIONS
What are electronic payments? What benefits do they offer? Why are donors promoting their use?

Many organizations that provide relief and development services disburse large volumes of low value payments in their programs and daily operations. Frequently, these payments are made in cash or by check. Increasingly, organizations are using electronic payment (e-payment) systems to deliver payments by various means: electronic fund transfers (EFTs), prepaid and smart cards, e-vouchers, and mobile money. This Toolkit gives organizations like yours information on how to transition from cash to e-payments. While USAID does not endorse a particular e-payment technology, it is clear that systems that share the following characteristics will make the most powerful contribution to development beyond efficiency gains for your organization: (1) broad reach across demographic groups and socio-economic strata; (2) electronic/digital transmission and data capture; (3) the ability for individuals to

KEY TOOLS

INTRODUCTION TO MOBILE MONEY
A self-paced online course developed and delivered by the Mobile Solutions team at USAID, QED, and TechChange. It includes over two hours of dynamic content informed by the best thinking in the field.

PAYMENT COMPARISON
This document provides a general description of payment modalities, service providers, product offerings, and relevant case studies.
transact from their own accounts. Systems that encompass these features can provide the foundation for a broader suite of financial services and support market transformations by building the infrastructure for an inclusive, digital economy.

Though the focus of this Toolkit is to provide guidance to your organization on how to transition your payments to gain immediate operational and programmatic benefits, some of the most valuable benefits are the overall development outcomes. By introducing your staff, beneficiaries, program participants, and vendors to a new e-payment system, you are building a pathway to inclusive financial and business ecosystems.

**Key Benefits to Adopting E-Payments**

By adopting e-payments, your organization can derive a variety benefits:

- Improved cost savings and efficiency
- Increased transparency
- Reduced leakage (syphoned funds) and waste
- Reduced security risks to program staff and participants
- Improved access to financial services for your payment recipients
- Improved access to a growing ecosystem of value-added and business services for your payment recipients

The remarkable growth of communications networks are enabling organizations to transition from cash to e-payments in a growing number of markets. Increases in mobile phone access and a corresponding increase in ‘mobile money’ products create opportunities in many markets to use inclusive e-payment platforms. Mobile phone access in the developing world now far outstrips access to banks. Table 1 compares access to formal financial institution accounts with mobile phone accounts in a few illustrative countries. The number of POS terminals that accept various prepaid and smart cards is also growing (Table 2), which will expand the utility of systems that incorporate cards as a channel to access financial services.

USAID and other international donors are driving the adoption of inclusive e-payments as a means to achieve development outcomes and improve aid efficiency. USAID announced in September 2013 that within one year it will require applications for funding to include the use of e-payments or an analysis of why the use of cash is still necessary. Other donors are following suit and e-payments will soon be the standard for development programs. This movement is rooted in a firm belief that e-payment platforms can accelerate financial inclusion, improve accountability, increase transparency, empower entrepreneurs, and unlock the private sector. Private and public sector organizations also have joined together to forge a global movement to e-payments through the Better Than Cash Alliance.

This global alliance is a collaborative effort promoting and supporting the transition from cash to e-payments by governments, private sector, and the development community.

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**STORIES FROM THE FIELD**

Plan International in Uganda was an early adopter of e-payments. In 2012 Plan used physical cash to reimburse transportation costs to each of the 50 to 100 participants who attended its frequent workshops across five districts in Uganda. When Plan switched these payments to a mobile money bulk payment product, it saved 77 percent in costs, saved participants time by eliminating the line for cash disbursements, increased staff productivity by reducing paperwork and freeing up time for delivering training content, increased transparency, and reduced the security risks of cash handling for its staff. For details on this case and others, see the Uganda Market Assessment and Case Studies.³

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³ USAID, Founding Member of the Better than Cash Alliance, Pledges Deep Commitment on One Year Anniversary: [http://blog.usaid.gov/2013/09/better-than-cash-alliance-one-year-anniversary/](http://blog.usaid.gov/2013/09/better-than-cash-alliance-one-year-anniversary/)
The Journey from Cash to Electronic Payments

Learn More

**Recommended Resources**

| Key websites for further reading: | USAID Website
NetHope Solutions Center
Better Than Cash Alliance (BTCA)
Consultative Group to Assist the Poor (CGAP) | GSMA Mobile Money for the Unbanked
(GSMA is the association for mobile network operators)
Cash Learning Partnership (CALP)
MicroSave Website and YouTube Channel |

**TABLE 1**

Comparison: Formal Financial Institution Accounts & Mobile Phone Accounts

- Accounts at a formal financial institution: 2011 (% age 15+)
- Mobile Subscriptions: Q4, 2011 (% population)*

![Bar chart showing comparison between formal financial institution accounts and mobile phone accounts for various countries.](chart.png)

Source: World Bank Databank

**TABLE 2**

World Bank Global POS Terminal Penetration, 2013

![Map showing World Bank Global POS Terminal penetration in 2013.](map.png)


Listen to USAID’s Priya Jaisinghani discuss the benefits of e-payments.

![Video thumbnail](video_thumbnail.png)
The transition from cash to electronic payments (e-payment) begins with a scoping exercise to assess your organization’s use of cash in both its operations and program payment streams.

- Operations payments are made to non-program participants—such as employees, consultants, vendors, and other merchants for petty cash, travel per diems, supplies, etc.
- Program payments are made to program participants or recipients of services, including attendees at training workshops, cash-for-work participants, disaster-affected families who receive emergency assistance, community health workers who receive incentives, and farmers for agricultural inputs.

In Bangladesh, nine USAID implementing partners assessed their payment streams from receipt of donor funds through disbursement of payments in the field. The following graphic depicts the typical payment flows from USAID headquarters in Washington, DC, through to the end program recipient in another country office.

**KEY TOOLS**

**PAYMENT SCOPING SURVEY**

The Payment Scoping Survey is designed to help your organization map the use of physical cash and e-payments in its operations and programs. The survey tool can be customized and used as a first step in evaluating alternative e-payment options to replace payment streams transacted in cash.

**PAYMENT SCOPING TEMPLATE**

The Payment Scoping Template is designed to help your organization get a handle on operations and program payment streams. The spreadsheet tool can be adapted as needed, and estimates are acceptable.

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**SOURCE:** USAID mStar Bangladesh Assessment Report, July 2013: Unpublished report

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1Cash equivalents also include certified checks when they carry a guarantee from the bank that the recipient will receive the full face value of the check from the issuer’s bank.
Your organization should conduct an internal analysis of its cash use prior to or concurrent with doing additional internal and external analysis discussed in Steps 3-5. Undertaking a cash scoping survey will require input from different departments within your organization, including finance and program staff. Your senior leadership’s endorsement of the undertaking is key to overcoming any internal resistance or a reluctance to relinquish control of cash money management. At this stage, it is useful to identify “champions” in your organization who believe in the benefits of e-payments and are willing to lead the change.

Your cash scoping survey will also shed light on how payments are processed. This information will help identify key elements such as pain points, bottlenecks, or inefficiencies that you can address by alternative payment methods. In process mapping, you will:

- Map all cash payment streams in operations and programs.
- Create a process flow chart of each payment stream.
- Document values, volumes, frequency, type, and numbers of payments in each stream.
- Identify cash management points and who controls them.
- Identify any pain points in the process (such as excessive overtime by staff during disbursements, potential for fraud, costs, and fees).
- Identify barriers and/or bottlenecks.

Going through this process is an important step to inform the decision-making on how and when to transition from cash to e-payments.

### TABLE 1
Who is receiving operations cash/check payments

<table>
<thead>
<tr>
<th>Category</th>
<th>Percent of Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consultants</td>
<td>74.20%</td>
</tr>
<tr>
<td>Employees</td>
<td>61.30%</td>
</tr>
<tr>
<td>Vendors</td>
<td>77.40%</td>
</tr>
<tr>
<td>Others (petty cash &amp; service)</td>
<td>22.60%</td>
</tr>
</tbody>
</table>

### TABLE 2
Who is receiving program cash/check payments

<table>
<thead>
<tr>
<th>Category</th>
<th>Percent of Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conditional Cash Transfer Recipients</td>
<td>34.30%</td>
</tr>
<tr>
<td>Loan Recipients</td>
<td>25.70%</td>
</tr>
<tr>
<td>Voucher Recipients</td>
<td>8.60%</td>
</tr>
<tr>
<td>Others (e.g. travel, humanitarian)</td>
<td>25.70%</td>
</tr>
</tbody>
</table>
The Journey from Cash to Electronic Payments

Step 3
Costs of Payments: Cash versus Electronic Payments

What are the full costs of your cash payments compared to electronic alternatives?

Payment methods have both financial costs (such as transaction fees, expenditures for travel to a disbursement site, security, or insurance costs for transporting cash) and non-financial costs (such as transparency of payment tracking, staff, and recipient security). Analyzing these costs holistically is a key step in evaluating alternative disbursement mechanisms. Doing this cost analysis early in the process gives you a useful baseline of costs for planning, decision making, budgeting, implementation, and monitoring. This baseline analysis can be very useful later for monitoring and reporting (including for donors). Because some costs are non-financial, you should solicit input from both finance and program staff involved in the payment streams.

As with any system change or technology transition, adopting new methods may not produce immediate cost savings. Organizations that have used this tool have found that financial costs may increase initially (see Stories from the Field).

Some organizations found that ongoing financial costs for electronic payments (e-payment) transactions may be higher than cash transactions, but they saw non-financial savings such as less staff time devoted to payment processing, eliminating payment leakages through improved transparency, and even facilitating client access to additional financial services. In fact, some organizations rank these non-financial costs as significant.

The Costing Utility Analysis Tool is a simple workbook designed as reference tool and guide for organizations to conduct a comparative evaluation of the non-financial and financial costs of using physical cash and e-payments in their programming and operations. The tool suggests categories of costs that organizations may incur in using cash and e-payments. Organizations are encouraged to expand and modify the categories to fit their profile. The workbook also provides an analytical framework for organizations to compare the identified costs of cash with the costs of transitioning and using e-payments over time.
considerations. This was the case for Concern Malawi in its initial assessment of cash payments in its operations and Food Income and Markets Program in 2014. Some of its greatest identified challenges involved non-financial costs such as security risks to staff and participants around handling cash; staff morale when making cash disbursements that involve high volumes of tedious paperwork, checking, and reconciling; inflexibility of cash disbursements that requires staff to be physically present at the site; and potential for fraud and leakage.

Some organizations, however, have discovered financial cost savings such as Catholic Relief Services’ (CRS) Agriculture program in Haiti. In 2013, CRS transitioned from cash vouchers to electronic vouchers for agriculture subsidies to farmers and saved $4.40 per voucher. They also reduced the number of staff required on site for disbursement from three to zero. Similarly, the Central Asian Development Group, a USAID partner in Afghanistan, found that the money invested in setting up systems to replace cash salaries with mobile payments was recovered within six months, after which time the firm realized a significant direct cost savings.

Lessons learned from many organizations show that costs are context specific and are not always obvious. Thus, this internal analysis of costs for cash and alternative payment streams is important to aid the organization in determining when, how, and whether to make the shift from cash to e-payments.

In 2013, Alalay Sa Kaunlaran, Inc. (ASKI), a nonprofit in the Philippines that promotes socio-economic development through client-focused financial and non-financial services, wanted to expand the transition from cash to e-payments for its microfinance clients through the BankKO mobile banking platform. ASKI used the costing utility analysis tool and identified initial costs related to the transition, including:

- the purchase of test mobile phones;
- training for staff and clients
- an increase in staff resources to analyze cash mapping, identify potential partners in rural areas for cash in and out services, and e-payment options
- partnering with the service providers

This analysis helped ASKI prepare a budget and plan for the transition.

<table>
<thead>
<tr>
<th>Learn More</th>
<th>Recommended Resources</th>
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<tbody>
<tr>
<td>Cost-savings, speed, and security in Haiti</td>
<td>• Plugging Into Mobile Money Platforms: Early Experiences of NGOs in the Field, January 2012. A focus note that reviews early lessons for NGOs from the field and explores three central questions: Does initial evidence support the notion that mobile money is a cheaper, faster, and more secure distribution platform? What aspects of program design have the greatest impact on the costs and benefits of mobile money? What have NGO early adopters learned from their experience in Haiti?</td>
</tr>
</tbody>
</table>
| E-payments experiences from a broad range of Kenyan institutions | • Cash for Assets: World Food Programme’s Exploration of the In-Kind to E-Payments Shift for Food Assistance in Kenya, September 2013. A case study on the joint World Food Program (WFP)/Government of Kenya conditional cash transfer scheme.  
• Kenya Case Studies in E-Payments, November 2011. A series of case studies on the use of mobile money in Kenya, covering use by a government ministry (Ministry of Lands), a USAID NGO implementing partner (PACT), a nonprofit institution (Kenya National Examinations Council), and a small microfinance institution (Juhudi Kilimo). The brief illustrates how each user is leveraging mobile money and the benefits derived by moving from cash to electronic payments. |
<table>
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<tr>
<th>Learn More</th>
<th>Recommended Resources</th>
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| Take-aways from the e-payments transition process in Bangladesh | • Snapshot describing the experience of HelpAge International in Bangladesh in its transition from cash to mobile payments in 2013. It includes an overview of activities, the types of transactions that were transitioned to mobile payments, what that transition process entailed, and challenges and benefits associated with the transition. It highlights the consideration of both financial and non-financial costs involved.  
• Snapshot describing the experience of English In Action in Bangladesh in its transition from cash to mobile payments in 2013. It includes an overview of activities, the types of payment transactions transitioned to mobile payments, what that transition process entailed, and challenges and benefits associated with the transition. It also includes key takeaways from their experience so that others can apply English In Action’s lessons learned to their own transition to digital payments. |
| What USAID is doing to promote these benefits | • New Trends in USAID Procurements: e-Payments and Mobile Money. Featuring USAID, NetHope, and Chemonics, this webinar includes the following topics:  
  • Specific initiatives USAID is undertaking to encourage the use of e-payments by its partners  
  • Tools and resources an organization can use to evaluate the appropriate use and costs of transitioning to e-payments in a specific geographic and program context  
  • Steps USAID contractors and partners are taking to move from cash to e-payments in their operations  
  • Real examples of programs ideally suited to make the transition from cash to e-payments |
| Lessons on costs of transitioning              | • Factors Affecting the Cost-efficiency of Electronic Transfers in Humanitarian Programmes, April 2014. A research study by CaLP, Oxford Policy Management (OPM), Concern Worldwide that aims to answer the key questions: Are electronic transfers more cost-efficient than traditional manual based cash delivery methods, and under what conditions?  
• Mobile Salary Payments in Afghanistan: Policy Implications and Lessons Learned, 2013. CAGD Policy paper shows through use of a randomized controlled trial with a large Afghan firm, that paying salaries using mobile money instead of physical cash produces significant cost savings for the employer, boosts demand for the services of the MNOs, and increases employees’ propensity to save part of their incomes. |
Each market has its own, unique payment ecosystem. Your organization needs to analyze the payment ecosystem where it operates to determine the market’s readiness for use of electronic payments (e-payment) in your program context. An up-to-date assessment is essential to understanding the local context, as these markets are evolving rapidly in many countries (see the GSMA Mobile Money Deployment Tracker under key tools and on the following page). In addition, donors such as USAID are increasingly expecting their partners to either integrate e-payments into their work or provide a justification if the services are not sufficiently mature.

Ideally, you should conduct this market analysis simultaneously with your organization’s analysis of internal cash flow described in Step 2 to enable you to map your payment needs against available payment products and services.

The market assessment will provide you with important data on the available payment options, current levels of e-payment usage, and payees’ capabilities (including your organization’s recipients). In 2013, NetHope and USAID conducted market assessments in Uganda and Tanzania to provide information

**KEY TOOLS**

**NETHOPE GUIDE TO E-PAYMENT MARKET ASSESSMENT**

Key Topics, Questions, and Sources of Information: This guide provides suggestions on how to conduct a basic market assessment to determine the feasibility of e-payments. It outlines areas for inquiry such as infrastructure, consumer usage levels, regulatory environment; includes references to secondary and primary data sources; and lists key metrics to consider and observe.

**GSMA’S MOBILE MONEY UNIT DEPLOYMENT TRACKER**

GSMA’s Mobile Money Unit Deployment Tracker monitors live and planned mobile money services through banks and mobile network operators (MNOs). This online tool is currently limited to mobile money and does not include other types of e-payment services such as prepaid cards.
to USAID implementing partners interested in transitioning to e-payments. The assessments looked into each of the areas outlined below to provide organizations with market data that could inform their own evaluation of e-payments in Uganda and Tanzania.

In addition to using online resources to assess a market, it's important to talk to your staff and colleagues, your peers, local donors, and other industry stakeholders to assess the real operational aspects of the market and how e-payment products and services have been used by others. It's also possible that others have already conducted a market analysis or have relevant information, and can help analyze the market context. If you want to seek guidance on doing a market assessment, you can refer to the U.S. Global Development Lab webpage and/or contact the NetHope Payment Innovations Project.

**Service Providers:** may include MNOs, banks, third party payment providers
- Who are the MNOs, banks, third party payment providers?
- What products and services do they offer?
- Are providers’ services interoperable?
- Where do they provide services?
- Are there mobile money bulk payment products for corporate customers?
- Are there prepaid debit cards connected to POS terminal systems or ATMs?

**Consumer Behavior:** includes financial behaviors of payment recipients, segmented by geography (rural, urban), type of recipient (program participants, vendors, staff), and user capability to understand and use e-payments
- Who uses bank accounts and how?
- Who uses mobile phones and how?
- What is the level of financial and technological capability?
- What level of consumer behavior research and segmentation is needed?

**Regulatory Issues:** includes key policies and regulations regarding e-payments and mobile money that will have an impact on the use of e-payments
- What are the relevant financial regulations that affect e-payments?
- What are the main regulations that affect payment recipients like Know Your Customer (KYC)?
- Are there regulations that limit payment transaction sizes?
- Are there regulations that restrict the type of entity that can provide e-payments?
- What are the relevant consumer protection policies?

**Donors:** includes donors who are promoting the transition from cash to e-payments through support and incentives to the payment ecosystem of suppliers and consumers of e-payments
- Who are the donors in the market?
- How do they support and promote e-payments?
<table>
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<tr>
<th>Learn More</th>
<th>Recommended Resources</th>
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<tbody>
<tr>
<td>Understanding the regulatory and policy environment</td>
<td>• Key questions for assessing relevant aspects of the regulatory environment in your country.</td>
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<td></td>
<td>• CGAP Branchless Banking Diagnostic</td>
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<td>Statistics databases</td>
<td>• Mobile Intelligence for Development</td>
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<td></td>
<td>• CALP’s Cash Atlas. A cash mapping tool on cash transfer programs that are increasingly being used as a viable response in emergency situations throughout the world.</td>
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<tr>
<td>Industry trends</td>
<td>• GSMA Mobile Money for the Unbanked (MMU) 2013 State of the Industry Report. The report contains key findings and insights on the growth of the mobile financial services sector, including mini case studies and mobile money best practices. It also covers mobile insurance, mobile credit and mobile savings services in addition to mobile money services.</td>
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<tr>
<td></td>
<td>• World Bank World Payment Reports</td>
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<td></td>
<td>• Mobile Payments Readiness Index (Mastercard)</td>
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<tr>
<td></td>
<td>• GSMA MMU Driving Customer Usage of Mobile Money for the Unbanked</td>
</tr>
<tr>
<td>Country reports</td>
<td>• Market assessments for Tanzania and Uganda conducted by USAID’s Global Development Lab, NetHope's Payment Innovations Team, and MEDA. Provides an in-depth assessment of the mobile money market and explores key findings from interviews with development community NGOs and contractors in relation to their use of physical cash versus electronic payments in the field.</td>
</tr>
<tr>
<td></td>
<td>• The Financial Inclusion Tracker Surveys Project. The FITS Project is a multiyear research initiative providing critical data, analysis and insights to stakeholders in the mobile money field in particular, and those in financial inclusion generally, and includes Pakistan, Tanzania and Uganda, with more countries to be added soon.</td>
</tr>
</tbody>
</table>
The market assessment outlined in Step 4 will identify existing service providers and available electronic payment (e-payment) products in your market. However, you may need to conduct additional due diligence on the service providers and their products to compare services and select the provider(s) that best meet your organization’s needs. In any market the service provider options may include financial institutions such as banks, MNOs, and third party service providers.

Based on input from many organizations, the analysis and negotiations required to identify and contract the right service provider can be formidable. One lesson early adopters of e-payments learned is to involve multiple disciplines in the organization early in the process. You should involve your key staff from finance, operations, legal, and IT departments. With a multidisciplinary working group or team, your organization will be better able to effectively communicate and articulate your product needs to a private sector service provider and establish a framework for collaboration.

Your multidisciplinary team should develop the minimum business requirements document—a Request for Information (ROI) or a Request for Quotation (RFQ) that can be issued to service providers to solicit information or a price quote. There are some key considerations specific to e-payments you should consider in preparing RFQs, conducting due diligence, and negotiating product or service contracts.

**KEY TOOL**

**SERVICE PROVIDER CAPACITY ASSESSMENT**

This tool provides a guide for your organization to use when deciding on an e-payments service provider in your market. The tool has two sections:

1) A statement of requirements for a bulk e-payments product that can be used to disburse funds. This can be inserted into a ROI, RFP, or RFQ.

2) Specific questions based on the statement of requirements that your organization can use to guide an interview with e-payment service providers.
service delivery. For each component listed below the specifications should address two customer levels—that is, the corporate customer or payer and the end user or payee. For example, training or staffing a customer service helpline for your staff implementing the payment system will be very different from training or staffing a customer service helpline for your payment recipients.

**Key Specifications**

- Product specifications for a bulk payment product
- Distribution channels and networks
- Customer service and training
- Data privacy/security/internal controls

When bulk payment products exist in the market (products that allow payments from one payer to multiple recipients) your organization may follow its standard procurement procedures and purchase the service as a corporate customer and “off the shelf.” In this case, issuing an ROI can be useful to receive detailed product specifications that can inform creation of RFQs.

There may be instances or markets where you choose to enter into a higher level business partnership with the service provider to refine or even develop bulk payment products. This can be a long, intense, and complex process. For example, in June 2013, given the lack of options in the Democratic Republic of the Congo, Mercy Corps put out a global Request for Proposal, and decided to partner with a card company called Squid that could deploy their solution in multiple countries.

A consortium or buyers’ club approach may also be useful in some markets. For example, your organization by itself may not have the significant payment volumes to generate interest or make it worthwhile for the service provider to customize a payment product. However, by coordinating with other organizations that seek the same type of bulk payment product, you may be able to generate interest, allow the provider to standardize contracts, and streamline negotiation procedures. By aggregating demand and agreeing to common requirements for the product, you may interest the service provider in developing a more tailored product or be able to negotiate discounts on the product from the service provider.

**STORIES FROM THE FIELD**

USAID contractor, JSI Tanzania wanted a better system to disburse cash to 20-200 training participants. Multiple MNOs offered mobile money products; JSI’s payment recipients also used multiple MNOs’ mobile money systems that were not interoperable. Rather than make a choice that would exclude some recipients or use all the MNOs platforms independently, JSI contracted with a third party service provider who streamlined the process by aggregating JSI’s payments and routing them through all the MNOs’ mobile money services.¹

¹Webinar “No Interoperability, No Problem”: http://solutionscenter.nethope.org/webinars/view/no-interoperability-no-problem-webinar
### Learn More

<table>
<thead>
<tr>
<th>Recommended Resources</th>
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<tbody>
<tr>
<td><strong>Tips for negotiating with service providers</strong></td>
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<tr>
<td>- The Digitizing Payments Process Kit is a collection of documents that provides practical guidance and resources for organizations that are shifting from cash-based to mobile payments for employees, contractors, or program beneficiaries. It was created by Vital Wave in coordination with USAID and with the support of the Bill and Melinda Gates Foundation after the successful implementation of a digital payments project in Uganda. In addition to describing the challenges and potential solutions for the expansion of mobile payments in Uganda, it contains a practical work plan, a description of required roles, processes, and resources, and dozens of useful tools for USAID missions, donor agencies, implementing partners, mobile operators, Business Process Outsourcing vendors, and other interested service or technology providers.</td>
</tr>
<tr>
<td><strong>Reports and guidance</strong></td>
</tr>
<tr>
<td>- Financial Documentation in the Use of Electronic Payments, Reference Tool: shows screenshots of different bulk payment service web interfaces.</td>
</tr>
<tr>
<td>- Protecting beneficiary privacy: A CALP tool presenting principles and operational standards for the secure use of personal data in cash and e-transfer programs.</td>
</tr>
<tr>
<td>- Profiles of Service Providers, Products and Services located on the NetHope Solutions Center.</td>
</tr>
<tr>
<td>- Webinar (USAID and NetHope) on the basics of using a third party service provider/aggregator to disburse funds to many people on different mobile networks featuring two companies—Selcom Wireless from Tanzania and Yo! Payments from Uganda, which have developed a solution to interoperability challenges in their markets, and John Snow, Inc., (JSI) from Tanzania, which uses this solution to facilitate last mile bulk mobile money payments.</td>
</tr>
<tr>
<td><strong>Experiences from the field</strong></td>
</tr>
<tr>
<td>- ELEVATE Phase I Report, MasterCard Worldwide &amp; Mercy Corps: July 2013. Describes results and learning from mobile voucher tests conducted in slum areas of Kathmandu, Nepal.</td>
</tr>
<tr>
<td>- Case study: a dialogue between MNOs and USAID implementing partners in Uganda; Appendix 5 from Uganda Market Assessment and Case Studies which documents Q &amp; A between three MNOs and USAID implementing partners during an Electronic Payments workshop organized by USAID and NetHope in Kampala, Uganda on November 8th, 2012.</td>
</tr>
<tr>
<td>- Webinar “Deploying mobile payments successfully with Beyonic and Educate! in Uganda,” 2014. The organization Educate! and service provider Beyonic offer insight to organizations looking to incorporate mobile money into their day-to-day operations.</td>
</tr>
</tbody>
</table>
Step 6

Process Integration

How do you adjust standard operating procedures and refine processes for a smooth transition?

This step covers three main points with guidance on how to:

- Review and revise standard operating procedures (SOPs)
- Review and revise process flow charts
- Endorse processes, financial controls, and reporting from finance and audit departments

To help your organization transition from cash to electronic payments (e-payment) you will need to devote staff resources and time to analyzing systems, processes, and current payment SOPs, and incorporate adjustments for new payment systems. Specific changes will, of course, vary by organization. Whether the system is cash or electronic, it’s still simply payments with appropriate financial controls. Pathfinder’s switch from cash and checks to M-PESA, a mobile money service in Tanzania, required only a few adjustments to its procedures, as illustrated in Box 1.

Mapping the existing payment process in a flow chart will help you understand the changes required to implement a new payment system. Payment process mapping

BOX 1

<table>
<thead>
<tr>
<th>Cash/Check Procedure</th>
<th>Mobile Payments Procedure</th>
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<tbody>
<tr>
<td>Request for payment initiated by program or administrative team</td>
<td>Request for payment initiated by program or administrative team</td>
</tr>
<tr>
<td>Send file to payment authorizer for final authorization</td>
<td>Send file to payment authorizer for final authorization</td>
</tr>
<tr>
<td>Confirm payments, verify forms received post expenditure (remove from advance)</td>
<td>Confirm payments, verify forms received post expenditure (remove from advance)</td>
</tr>
<tr>
<td>Approve costs</td>
<td>Process payment, convert to CSV file, upload to M-PESA</td>
</tr>
</tbody>
</table>
  - Issue check to bank officer closest to activity site
  - Treat expenditures as an advance
  - Prepare payment voucher and entry into accounting system
  - Alert program officer on site that payment initiated

SOURCE: http://solutionscenter.nethope.org/assets/collaterals/May22WebinarFinal.pdf
can uncover key issues such as touch points, assignment of responsibilities, process times, and financial controls. This analysis can also help you identify opportunities to streamline processes and highlight the potential program and financial benefits of using e-payments. In Uganda, Educate!, a nonprofit working in the education sector, and Beyonic, a private sector payment aggregator, partnered to streamline and facilitate Educate!’s payments to teachers using mobile money instead of cash. Looking at process maps that highlight Educate!’s payments before and after switching to mobile money illustrates how some payment touch points changed and how the organization gained efficiencies.

In developing SOPs and payment process maps, approval and endorsement by your organization’s CFO or finance director and internal and external auditors is essential. Obtaining leadership support can help overcome obstacles during initial e-payment rollout and subsequent scaling. At this point, it is important to identify potential risks of e-payments and develop strategies to mitigate them. Finance and audit staff (both internal and external) can provide expertise on risk management to incorporate sufficient controls and reporting mechanisms into SOPs for e-payments.

SOURCE: http://solutionscenter.nethope.org/assets/collaterals/Educate%2C_Beyonic_Webinar_with_Nethope_-_Final.pdf
Learn More  |  Resources

**Reports and guidance**
- Electronic Payments Standards and Practices Report for Electronic and Mobile Payments, Section 5 Risk Analysis and Mitigation
- Financial Documentation in the Use of Electronic Payments, Reference Tool: shows screenshots of different bulk payment service web interfaces

**Experiences from the field**
- Demystifying Electronic Payments featuring Pathfinder Tanzania is a webinar on evaluating payment alternatives and recommends SOPs for payment disbursement and reconciliation
- New Trends in USAID Procurement is a webinar featuring Chemonics discussing how to adapt SOPs
- Chemonics Finance and Administrative Internal Process Map for M-PESA payments
- JSI Mobile Money Standard Operating Procedures

Pathfinder Kenya’s finance manager in Mombassa processes mobile payments for training participants according to their standard operating procedures, April 2014.
Step 7

Staff Endorsement, Training, and Internal Trial

How can your organization seek buy-in and build internal capacity and commitment? How do you establish roles and conduct an internal test-run using electronic payments?

As with any behavior change, gaining your leadership’s initial endorsement is key to promoting electronic payments (e-payments) throughout your organization. From HQ through country finance offices to program officers in the field, an organization often needs a champion to initiate the change and drive the organization’s commitment to transition to e-payments.

Pathfinder was fortunate to have such a champion. In Kenya where mobile money is ubiquitous with M-PESA, Pathfinder initiated a transition to mobile money for program and operation payments in 2011. After this experience Pathfinder’s finance manager, who saw the benefits firsthand, transferred to Pathfinder’s head office in Boston. From Boston he continued to champion the use of e-payments and incorporated them into the organization’s global finance policies. Cultivation and use of experienced leadership within an organization across programs and geographies can accelerate a transition to e-payments.

Although e-payments allow for centralizing payment origination, responsibility for payments flows throughout an organization (as indicated in the graphic on the following page). Finance officers, program officers, and field staff all play key roles in ensuring that payments are delivered and received by program clients. For this reason, your organization should clearly define roles and responsibilities for the e-payment chain of

KEY TOOL

BUILDING INTERNAL CAPACITY AND COMMITMENT FOR E-PAYMENTS

Created by NetHope, this guide/checklist summarizes key considerations for staff training sessions and live demonstrations, trials with staff, and sample head office transactions.

STORIES FROM THE FIELD

In 2013, head office leadership at Catholic Relief Services (CRS) organized a day-long training for all field offices to provide tools and develop a basic understanding of e-payment methods. Leadership commitment then flowed down to country offices and across programs.
The decision to shift from one mode of payment to another should be endorsed and supported by the highest level of your organization’s senior management, such as the CEO or country director. Organizations have also noted how essential it is for the finance and internal audit teams to be on board and comfortable with the new payment process, policies, and procedures.

It’s important for your organization’s staff to understand the nuts and bolts of e-payments and have direct experience using the e-payment product selected. The World Food Program team in Kenya that introduced a new e-payment card based system for delivering aid, advises to first “learn by doing” with your own team and engage a wide range of staff in e-payment system development. Staff mastery of the payment mechanism...
should precede paying program recipients with e-payments.¹ When Pathfinder decided to eliminate cash from its operations in Tanzania, it used a phased approach to ensure staff at all levels endorsed the system and were trained before moving to pay its 3,500 community health workers with the mobile money product M-PESA.

In addition to developing training materials internally, your organization should request that payment service providers train your staff to use the product (include this in the service provider contract). Direct knowledge of and experience with how the product works throughout the organization will make the staff ambassadors for the product to your program recipients, and also identify problems or challenges likely to arise in a program rollout. Having staff trial and use specific products—stored value cards, mobile money cash out services, or money transfers—will help develop trust in the product, identify potential issues that the service provider may need to address, and allow your organization to adjust its policies and staff training before rollout to your program recipients. In addition, staff use allows all levels of the organization to verify the transactions throughout the entire payment cycle from distribution to receipt and confirmation.

### STORIES FROM THE FIELD

**American Red Cross** compiled a training list for staff and volunteers in a cash-transfer program using stored-value cards includes:

- processing and procedures for card distribution to clients
- collecting key beneficiary information
- entering beneficiary data (if the volunteers/staff are entering information into a database)
- running reports for monitoring client activity and distribution activity from the online system
- providing beneficiary with key points of information on the stored value cards
- understanding restrictions/specific capabilities of the card
- raising awareness of the common problems associated with the payment mechanism and how to resolve them

**SOURCE:** *Delivering Cash Through Stored Value Cards Toolkit* *(Oct 2013 – draft pending publication)*

### STORIES FROM THE FIELD

As Concern Malawi began testing mobile money, its finance manager decided to trial it using per diems and other allowances with staff first. They understood that if anything went wrong with receipt of their own payments the staff would quickly inform the finance department that a problem needed to be solved with the new payment system.

### Learn More

<table>
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<tr>
<th>Recommended Resources</th>
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<tbody>
<tr>
<td><strong>Tools</strong></td>
</tr>
<tr>
<td>Mercy Corps Diary of a Mobile Money Program: e-Book 1 From Planning Phase to Pilot Launch</td>
</tr>
<tr>
<td>IFRC Introduction to Cash Transfer Programming, a two hour e-learning course available on the Learning Platform (free but new users will need to register)</td>
</tr>
<tr>
<td><strong>Experiences from the field</strong></td>
</tr>
<tr>
<td>Demystifying Electronic Payments is a webinar presentation featuring Pathfinder Tanzania that looks at building internal staff commitment to e-payments</td>
</tr>
<tr>
<td>World Food Program Use of E-Payments for Food Aid in Kenya, webinar from BTCA</td>
</tr>
</tbody>
</table>
Preparing Recipients and Testing the System

The shift to electronic payments (e-payment) only works if recipients can access the payments and use the new products and services successfully. This is a behavior change process that will only succeed if the payment system is designed with recipients’ perspective and capabilities in mind. Doing market research on recipient behavior, conducting trainings, collecting feedback, and holding refresher trainings are essential.

Facilitating recipient uptake may require different approaches including below-the-line marketing, tailored training to improve users’ comfort with the technology, and an emphasis on consumer protection.

Whether done in collaboration with the payment provider or independently, training needs to be tailored based on an analysis of recipient profiles and how familiar they are with the new system (such as mobile money or debit cards) and how e-payments are used (such as cash-out or consumer purchases). Research confirms that the skills consumers need to adopt new technologies are learned rather than intuitive. In the graph below, GSMA’s Mobile Money for the Unbanked pinpoints a five-step journey to regular mobile money use. By incorporating e-payments into your programs, you are accelerating this process for your participants.

In designing training, your organization should focus on its recipients’ particular behaviors, needs, and capabilities. Different capabilities, including language, financial, and technical
literacy require customized approaches. Multiple methods to build recipient profiles that provide insight into e-payment adoption issues and inform training include the following:

- Financial diaries\(^1\) that may already exist on recipient behavior and use of e-payments
- Qualitative research through focus group discussions
- Quantitative research through survey data collection

Although there is no one-size-fits-all training for e-payments, training programs should address key issues that will help recipients use e-payments immediately and regularly, and build trust in the system and self-confidence to use it (Table 1). One key lesson from e-payment deployments is that actual use and trial of the new e-payment system during training is especially effective. Different approaches have been used for recipient training. An organization may collaborate with the service provider, such as when mobile network agents are tasked with training mobile money customers on how to use the service. Another key training component is to facilitate registration for recipients on the new service. Registration itself can be challenging in some contexts. Visual content, such as comics or posters located at the transaction point of service, and staff posted to assist recipients at transaction points (such as ATMs, shops with POS, or mobile money agent cash-out points) are useful training techniques. In Nepal, Mercy Corps used storyboards and posters to describe how products function and show the value of a mobile money e-voucher program. Sometimes the payment providers also offer user guides, flipbooks, customer activity guides, and product material that describe product features that can be adapted to an organization’s need.

In addition to preparing your recipients, it’s important to introduce e-payment use first

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\(^1\) Financial diaries initially described on [www.portfoliosofthepoor.com/](http://www.portfoliosofthepoor.com/) are now carried out and reported on by several organizations.

**TABLE 1**

**Key Training Components**

- **How do I use** the required technology (mobile phone, ATM, debit card)
- **How do I register** for the new service?
- **How do I access** my account?
- **Where can I go** to withdraw or use my money?
- Is my money **safe**?
- What is a **PIN** and what do I do if I forget my PIN?
- What if I **lose** my card, mobile phone, or replace my SIM?
- How do I see my **balance**?
- **Who** do I call/contact if it doesn’t work?

---

SOURCE: ELEVATE Phase I Report, MasterCard Worldwide & Mercy Corps: July 2013
with a small group of recipients before rolling it out across a program. Some key tips for a successful trial include:

- **Trial first with a small group of recipients where close monitoring is possible** (i.e., recipients near your head and/or field offices) before expanding to more remote areas, and with payments that are recurring as opposed to one-off.

- **Expand systematically to groups of recipients based on quality and reliability of service provider network coverage and infrastructure**

- **Conduct feedback using personal interviews with a random sample of recipients and cash out agents or merchants to assess satisfaction**

- **Ensure there is an ongoing call-in customer service line provided by the service provider, and in some cases an additional line staffed by your organization for the trial**

- **Create a formal monitoring system (with a designated staff member) that processes the collection of feedback and includes prepared response mechanisms for immediate trouble-shooting and making revisions to the payment system**

Finally, you may be disbursing payments to recipients who are using the technology for the first time. You will also want to consider and address issues of consumer protection and data privacy. Training recipients to use these new e-payment systems successfully for the first time and guiding them to become regular users will help put recipients onto the path toward accessing financial and other value-added services.

We encourage the sharing of training materials to guide and inspire others. If you have any training materials that you are willing to share, contact the NetHope Payment Innovations Project to post them along with this Toolkit.

### Learn More

<table>
<thead>
<tr>
<th>Recommended Resources</th>
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<tbody>
<tr>
<td>Microfinance Opportunities Self-Paced Online Courses: Branchless Banking, Consumer Awareness, Consumer Financial Education, and Training the Trainer</td>
</tr>
<tr>
<td>GSMA: Driving Customer Usage of Mobile Money for the Unbanked</td>
</tr>
<tr>
<td>GSMA: Mobile Money for the Unbanked 101 (see sections on marketing communications and driving customer usage)</td>
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</tbody>
</table>

### Experiences from the field

- From Insights to Action: Building Client Trust and Confidence in Branchless Banking, 2013, identifies the barriers that inhibit clients’ use of new technologies (experiences from India, the Philippines, and Zambia)

- Diary of a Mobile Money Program: e-Book Two: Beneficiary Financial Diaries – In Their Own Words, which explains how Mercy Corps partnered with a mobile network operator and a bank to bring mobile money services to Haitians

- Microfinance Opportunities Webinar on Lessons Learned: Driving Adoption of Branchless Banking Through Consumer Education in India, the Philippines, and Zambia

### Consumer protection and data privacy

- AFI Policy Note, Consumer Protection: Leveling the Playing Field in Financial Inclusion
- CALP, Protecting Beneficiary Privacy: Principles and Operational Standards for the Secure Use of Personal Data in Cash and E-transfer Programs
Step 9

The Grand Plan and Rollout

What final preparations and plans should you make, based on trials, to prepare for rollout? How do you monitor how well electronic payments are being used?

Based on experiences with test-runs with internal staff and a sample of recipients, your organization is ready to develop a robust plan for launching and rolling out the new electronic payment (e-payment) system. Recent research evaluating the move to e-payments by governments and USAID implementing partners highlights best practices common to the design of successful implementations.¹ Early research and thorough planning are core components of a successful e-payment rollout. Building upon Steps 2–5, which focus on analyzing internal and external capacities, your organization should by now have a good sense of:

- The product range and geographic reach of existing e-payment service provider infrastructure and capability
- Your own organization’s capacity to smoothly manage the change
- The ability of the recipients to successfully adapt to the new systems

In this step, your organization’s preparations and plans are finalized. The actual e-payment rollout should be guided by a detailed implementation plan that lays out each step of the project, identifies key milestones, assigns responsibilities (staff designated and hired),

¹ Case study series on implementing electronic payments for government payments in four countries (Haiti, Kenya, the Philippines, and Uganda): http://betterthancash.org/better-than-cash-alliance-case-studies
sets deadlines, establishes metrics to measure and monitor progress on a real time basis, creates contingency and troubleshooting procedures, and develops recipient feedback loops.

Implementing e-payments includes three primary project phases as shown in the abbreviated Gantt chart in Table 1: (1) Planning and Setup, (2) Implementation and Management, and (3) Evaluation and Expansion. Data entry, management, and MIS require special attention in this process. Organizations that use e-payments need to have systems to register payees and track payments from initiation to receipt, ideally using data obtained directly from the service provider’s e-payment system.

E-payment platforms provide digital transaction reports, although the form and detail on these reports vary by service provider. A key functionality that e-payment platforms should provide is the ability to verify the account, whether phone- or card-

STORIES FROM THE FIELD

Data entry and error rates in recipient registration were major issues in Haiti’s effort to use mobile money for social welfare payments made through its Ti Manman Cheri program. The mobile money provider Digicel consistently rejected 15 to 25 percent of payments in every payment cycle because of errors and inconsistencies in data in each institution’s system (such as wrong phone numbers, ID numbers, and names).1 Pathfinder in Kenya was experiencing a similar level of transaction errors due to inaccurate recipient account information at the time of registering them for payments. One solution it came up with was to invent its own software application that allows recipients to send an SMS to Pathfinder that automatically uploads their number and mobile money account information into the Pathfinder system.


Key to Successful Data Management

- Compatible data entry formats for recipient registration and e-payments system registration
- Consistent data for recipient identification
- Compatible data reporting formats for transaction verification and confirmation
- Process to resolve data errors
- Data privacy and control policies
- Integrating technologies such as SMS into data collection processes

<table>
<thead>
<tr>
<th>TABLE 1: Abbreviated Gantt Chart</th>
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<tr>
<td><strong>Phase 1: Planning &amp; Setup</strong></td>
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<tr>
<td>Activities</td>
</tr>
<tr>
<td>1.1 Select Project Coordinator</td>
</tr>
<tr>
<td>1.2 Select Payment Modality</td>
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<tr>
<td><strong>Phase 2: Implementation &amp; Management</strong></td>
</tr>
<tr>
<td>Activities</td>
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<tr>
<td>2.1 Launch Announcement</td>
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<tr>
<td>2.2 Beneficiary Training &amp; Registration</td>
</tr>
<tr>
<td>2.3 Transaction Review &amp; Reconciliation</td>
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<tr>
<td><strong>Phase 3: Evaluation &amp; Expansion</strong></td>
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<tr>
<td>Activities</td>
</tr>
<tr>
<td>3.1 M&amp;E on Initial Launch</td>
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<tr>
<td>3.2 Collect Recipient Feedback</td>
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<tr>
<td>3.3 Plan for Next Rollout</td>
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based, before the payment is processed (as described in Step 5). Your organization may need to develop its own reconciliation and monitoring process, using data as discussed in Step 6. Prior to launch, your organization should set key metrics and performance indicators (KPIs) that can be used in ongoing measurement and evaluation. Common KPIs for e-payments include:

- Recipients targeted (# and %)
- Recipients successfully registered
- Failed registrations
- Transactions initiated
- Transactions completed
- Average time of transaction processing
- Cost of transaction
- Recipients with balance or stored value after first withdrawal
- Recipient complaints
- Time for complaint resolution

With these preparations and plans in place, your organization is ready to transition from cash payments to inclusive e-payments. To scale up and out, your organization should have systems and methods in place to capture recipient feedback and document the experience including lessons learned in order to improve systems.

<table>
<thead>
<tr>
<th>Learn More</th>
<th>Recommended Resources</th>
</tr>
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</table>
| **Reports and guidance** | • Key performance indicators for mobile money services  
• Alliance For Financial Inclusion’s guidance on measuring financial inclusion.  
• “E-transfers in Emergencies: Implementation Support Guidelines” a practitioners guide for aid agencies to use digital payment systems |
| **Experiences from the field** | • Case study series on implementation of electronic payments for government payments in four countries (Haiti, Kenya, the Philippines, and Ghana)  
• Pilot implementation plans for mobile money projects in Malawi and Indonesia |
Many USAID implementing partners and development organizations work in multiple countries and implement multiple programs within a country. Early adopters of electronic payments (e-payment) can play a key role as change agents within their own organizations by championing the use of e-payments and building momentum throughout the entire organization. This often starts from a single program in one country, to many programs, and then on to other country offices, and finally to the organization as a whole. This is the scaling up and out that will lead to the achievement of broader development outcomes.

Adopting inclusive e-payments is a goal governments, donors, and development organizations embrace to provide efficiencies as well as advance broader goals of reducing poverty and promoting inclusive and sustainable development through access to finance. According to the World Bank, over 50 countries have set formal targets and goals for financial inclusion. In addition, six governments have signed on as members to the Better Than Cash Alliance USAID has committed to moving its portfolio of funded projects to e-payment use, and the Bill & Melinda Gates Foundation is supporting development organizations to transition to e-payments as part of the pathway to digital financial inclusion. In this final step of the journey,
organizations that have successfully integrated e-payments into their operations are well-placed to transfer knowledge across the organization about lessons learned and best practices. In the rapidly evolving context for e-payments, early adopters can provide valuable insights to colleagues, thereby extending the potential for scaling up and out. Early adopters also play a key role in championing the benefits of e-payments with colleagues and development sector peers.

Your organization can scale up e-payments by expanding use within a project (to more recipients) and within a country (to more projects and/or operations), and then scale out to new countries and finally institutionalize it as the organization’s standard payment method.

The process for scaling e-payments up and out should be calculated but also iterative and flexible. Avoid rushing to scale, and instead revisit the initial implementation process or pilot small expansions with time for evaluation and adjustments. As suggested in previous steps, use the initial implementation process or pilot with a small recipient base to test the system’s technology, process, and controls, and allow time for evaluation and adjustments. As presented in the timeline above, World Food Program followed this iterative process in moving from in-kind food aid to cash assistance delivered ultimately with debit cards in Kenya.

Your organization can use the resources in this Toolkit to identify the “tipping point” for scale, including the Monitoring and Evaluation Dashboard discussed in Step 9 and the Costing Utility Analysis Tool discussed in Step 3. As illustrated in Table 1 (next page), various factors will influence your organization’s decision on when to scale up and out. Scaling out to new geographies may require a new market assessment. Tools and resources may already exist in your organization that can be used or adapted
such as SOPs, measurement dashboards, and training materials. The best way to facilitate this kind of scaling out is to actively manage the knowledge and skills learned in your organization’s early e-payment implementations and disseminate them throughout the organization. For example, the International Federation of the Red Cross (IFRC) conducts regional trainings and has developed toolkits for local Red Cross organizations that include modules on using e-payment tools to provide cash assistance following disasters. Collaborative organizations such as CaLP have developed guidelines and best practices based on implementation experience. NetHope maintains a library of case studies and resources on using e-payments you can find here.

E-payments are an important building block for greater financial inclusion, and for access to new service delivery opportunities that are emerging in more mature markets (see CGAP’s video on Digital Finance Plus). The opportunity for scaling up e-payments in your organization is growing with the rapidly changing market. By seizing this opportunity, you can play a key role in helping your recipients access these valuable services and improve their lives.

Digital Finance Plus: using mobile money and branchless banking to make basic, essential services and utilities more accessible to people at the base of the economic pyramid.

When expanding to new markets within the same country, it’s important to review whether there are regional differences in infrastructure, recipient capability, availability of products and services, and other factors. For World Food Program’s (WFP) work in Kenya, for example, mobile money may be ubiquitous in some parts of the country where many organizations use it to disburse payments, but areas in the north may lack sufficient network infrastructure. This regional difference prompted the WFP to use debit cards, since they can work offline, unlike mobile money.

### TABLE 1

<table>
<thead>
<tr>
<th>Factors</th>
<th>Tipping Point</th>
</tr>
</thead>
<tbody>
<tr>
<td>SYSTEMS</td>
<td></td>
</tr>
<tr>
<td>Transaction completion rate</td>
<td>90%</td>
</tr>
<tr>
<td>Successful transaction reconciliation</td>
<td>6 months</td>
</tr>
<tr>
<td>Provider capacity to handle additional</td>
<td>Adequate</td>
</tr>
<tr>
<td>payment volume (liquidity/locations)</td>
<td></td>
</tr>
<tr>
<td>ORGANIZATIONAL</td>
<td></td>
</tr>
<tr>
<td>Staff capacity to handle scale</td>
<td>Adequate</td>
</tr>
<tr>
<td>Staff training</td>
<td>Proficient</td>
</tr>
<tr>
<td>SOPs/manuals/MIS</td>
<td>Developed</td>
</tr>
<tr>
<td>M&amp;E results</td>
<td>Positive</td>
</tr>
<tr>
<td>Costs (financial and non-financial)</td>
<td>Acceptable</td>
</tr>
<tr>
<td>RECIPIENTS</td>
<td></td>
</tr>
<tr>
<td>Training</td>
<td>Effective</td>
</tr>
<tr>
<td>Accounts use after 1st payment</td>
<td>Active</td>
</tr>
<tr>
<td>Feedback</td>
<td>Positive</td>
</tr>
</tbody>
</table>

### STORIES FROM THE FIELD

When expanding to new markets within the same country, it’s important to review whether there are regional differences in infrastructure, recipient capability, availability of products and services, and other factors. For World Food Program’s (WFP) work in Kenya, for example, mobile money may be ubiquitous in some parts of the country where many organizations use it to disburse payments, but areas in the north may lack sufficient network infrastructure. This regional difference prompted the WFP to use debit cards, since they can work offline, unlike mobile money.

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