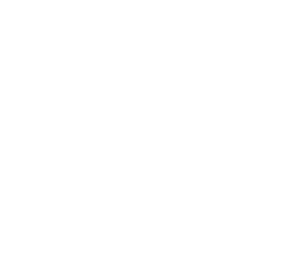


THE POTENTIAL GAINS OF DIGITIZING GARMENT SECTOR WAGES IN CAMBODIA



FINDINGS & RECOMMENDATIONS

MAY 2022

This publication has been produced by BSR HERproject and IFC under the IFC/ILO Better Work Partnership. BSR HERproject and IFC do not guarantee the accuracy, reliability or completeness of the content included in this work, or for the conclusions or judgments described herein, and accepts no responsibility or liability for any omissions or errors (including, without limitation, typographical errors and technical errors) in the content whatsoever or for reliance thereon.

ABOUT IFC

International Finance Corporation (IFC), a member of the World Bank Group, is the largest global development institution focused on the private sector in emerging markets and developing economies. We work in more than 100 countries, using our capital, expertise, and influence to create markets and opportunities for better lives. In fiscal year 2021, we invested \$31.5 billion in total commitments, including \$23.3 billion in long-term finance and \$8.2 billion in short-term finance, to private companies and financial institutions in emerging and developing economies, leveraging the power of the private sector to end extreme poverty and boost shared prosperity.

For more information, visit www.ifc.org.

ABOUT BSR HERPROJECT

BSR's HERproject™ is a collaborative initiative that strives to empower low-income women working in global supply chains. Bringing together global brands, their suppliers, and local NGOs, HERproject drives impact for women and business via workplace-based interventions on health, financial inclusion, and gender equality. Since its inception in 2007, HERproject™ has worked in more than 1,000 workplaces across 17 countries and has increased the well-being, confidence, and economic potential of more than 1,225,000 women and 775,000 men. www.herproject.org.

For more information about HERproject Digital Wages Program, please visit HERfinance Resource Hub, a centralized site dedicated to hosting and sharing tools, publications, and media resources to help companies and organizations integrate wage digitization in a way that considers the needs of female workers.

<https://herproject.org/resources/herfinance>

ABOUT BETTER WORK

Better Work – a collaboration between the United Nation's International Labour Organization (ILO) and the International Finance Corporation (IFC), a member of the World Bank Group – is a comprehensive programme bringing together all levels of the garment industry to improve working conditions and respect of labour rights for workers, and boost the competitiveness of apparel businesses. As a result of their participation with Better Work, factories have steadily improved compliance with ILO core labour standards and national legislation covering compensation, contracts, occupational safety and health and working time. This has significantly improved working conditions and, at the same time enhanced factories' productivity and profitability.

Currently, the programme is active in 1,700 factories employing more than 2.4 million workers in nine countries. As well as advising factories, Better Work collaborates with governments to improve labour laws, and with brands to ensure progress is sustained. We also advise unions on how to give workers a greater say in their lives, and work with donors to help achieve their broader development goals. Our vision is a global garment industry that lifts millions of people out of poverty by providing decent work, empowering women, driving business competitiveness and promoting inclusive economic growth.

ABOUT THE ILO

The ILO is devoted to promoting social justice and internationally recognized human and labour rights, pursuing its founding mission that social justice is essential to universal and lasting peace. The ILO brings together governments, employers and workers representatives of 187 member States, to set labour standards, develop policies and devise programmes promoting decent work for all women and men.

Acknowledgments

This publication was prepared under the direction of Leora Klapper, Lead Economist of the Development Research Group at the World Bank; Maria Soledad Requejo, Operations Officer for the Better Work Program at the International Finance Corporation; and Ella Moffat, HERfinance Manager at BSR HERproject, with inputs from Sethypong Sok, HERproject Cambodia Country Representative and Isadora Loreto, HERproject Manager. The authors would like to extend thanks to Sara Park, Jenny Hickey and Jeff Eisenbraun from Better Factories Cambodia and Better Work for their valuable insights, feedback and factory outreach facilitation.

We would like to thank Guy Stuart and Daniela Ortega from Microfinance Opportunities, for their contribution and insights with developing this report. Microfinance Opportunities with the assistance of Jose Vahl from L-IFT, were commissioned to support with the development of this research, data collection and the analysis of the results. Microfinance Opportunities is a global non-profit committed to understanding the economic realities of low-income and marginalized people. By describing and analyzing these realities Microfinance Opportunities inform the policies and practices of government, the private sector, multilateral organizations, civil society, and low-income and marginalized people themselves.

The authors would like to also extend thanks to our funding contributors: The European Union (for IFC under the ILO/IFC Better Work partnership) and The Walt Disney Company (for BSR's HERproject). We would also like to thank all of the garment sector employers, managers, female and male garment workers, financial service providers, and ecosystem organizations who participated in this research.



Abstract

Digital wages have the potential to reduce costs for employers and drive financial inclusion of workers. To assess the market potential for digital wage payments in Cambodia’s garment sector (which employs approximately 80% female workers), the research team interviewed representatives of the three main stakeholder groups—factories, financial service providers, and workers — as well as other stakeholders, such as unions and local merchants. Factories that pay wages digitally find it to be more cost-effective than cash, even after accounting for the start-up expenses to set up the digital system. Financial service providers who administer digital wages use various business models to offer workers a broad range of digital payment products. Among workers who receive digital wages, about half maintain a portion of their funds in accounts (as opposed to withdrawing them all in cash). But relatively few workers make digital payments because they perceive cashing out and making cash payments — including transfers to other parts of Cambodia — to be an easier option. Overall, the findings suggest that stakeholders have shared interests, which will create opportunities to expand the use of digital wages in Cambodia’s garment industry, with the potential to increase financial inclusion for women.

Acronyms

ATM	Automated Teller Machine
DFS	Digital Financial Services
FSP	Financial Service Provider
GDP	Gross Domestic Product
GMAC	Garment Makers Association of Cambodia
POS	Point of Service
QR	Quick Response (code)

Survey Locations: Phnom Penh, Kampong Speu, Kandal

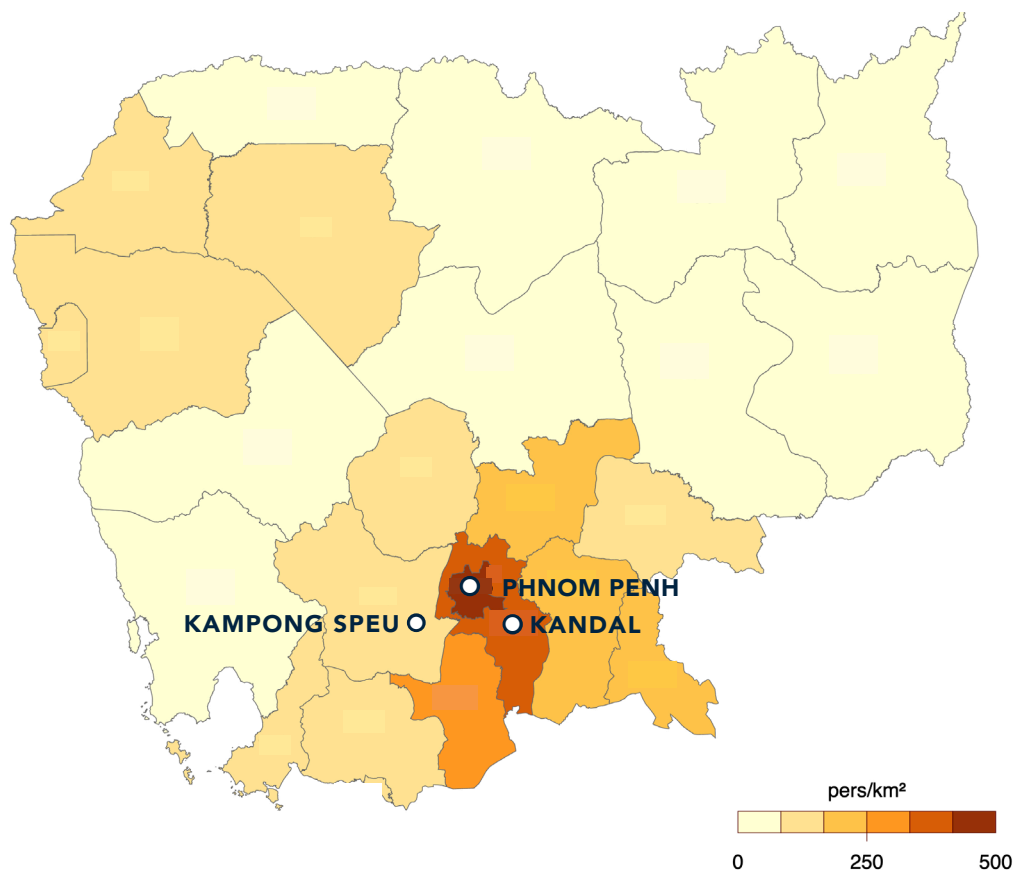


Table of Contents

Executive Summary	1
Introduction	5
Factories	7
Methods and Sample Description	7
Costs of Cash Wage Disbursement	8
Staff and security costs	9
Loss of production time	9
Cost Savings from Wage Digitization	10
Satisfaction and Popularity	12
Preferences and Concerns	13
Training and Factory Perceptions of Worker Attitudes	13
Financial Service Providers (FSP) Business Models	14
Workers	16
Sample and Demographics	16
Method for Receiving Wage Payments	16
Transfers to and from Family	17
Workers’ Spending Habits and Loan Access	19
Attitudes towards Wage Digitization	19
Workers’ Ecosystem	20
Conclusions and Recommendations	22
References	24
ANNEX 1: Resources on Digital Wages for Workers and Managers	25
ANNEX 2: Survey Questionnaires	26

Figures and Tables

Figure 1: Overlapping interests of stakeholders	6
Figure 2: Factory conversion to wage digitization by year	7
Figure 3: Share of workers digitized	8
Figure 4: Number of security guards hired to transport cash when paying in cash	9
Figure 5: Lost production time, in hours per pay period	10
Figure 6: Share of workers sending and receiving family transfers in the past three months ..	12
Figure 7: Share of workers performing transactions	18
Table 1: Two factory case studies: potential savings from wage digitization	12
Table 2: Levels of factory satisfaction	13
Table 3: Share of workers receiving wages by payment method and by region	17
Table 4: Salary withdrawal by digital wage payment method	17
Table 5: Share of workers sending a transfer to family by transfer method	18
Table 6: Share of workers receiving a family transfer by transfer method	18
Table 7: Share of workers performing transactions	20

Executive Summary

The garment industry drives the Cambodian economy, accounting for 16% of its gross domestic product (GDP) and almost 80% of its export earnings.¹ With more than 600 factories, the industry employs over 600,000 people (80% of whom are women), making the sector the country's largest employer. Most garment factories in Cambodia are still paying wages in cash twice a month which is often inefficient, risky and burdensome for employers and disempowering for workers.

Digital payments are an effective and sustainable payroll solution that greatly benefit employers and workers (both male and female). These benefits were particularly evident during the COVID-19 pandemic, which subsequently created interest around wage payments across the industry. Digitizing wages in the Cambodian garment sector has the potential to drive efficiency in the supply chain, while bringing large numbers of unbanked workers, especially women, into the formal financial system. Furthermore, digital payments can enable women's economic empowerment.

This report presents the results from research that was conducted in Cambodia in December 2020 — January 2021. The focus of the research was on the potential market for worker payroll digitization, through direct payroll deposits into workers' financial accounts (henceforth "digital wages"), in Cambodia's garment sector. The research sought to understand the interests and concerns of the market's three main stakeholders—workers, factories, and financial service providers (FSPs). In order to fully understand the potential benefits and challenges that a shift to digital wages might present to workers, the research also considered the context of the ecosystem that includes other economic actors, with a particular focus on those who conduct transactions with garment sector workers.

The research sample included 114 garment factories, 56 of which are fully or partially digitized. The research team also conducted interviews with 413 workers (82% of whom were female) from 68 factories. Just over half of these workers reported being paid into accounts. Forty-one ecosystem stakeholders, including landlords, petty retail merchants, food vendors, and mobile phone retailers were also interviewed to understand the readiness of the ecosystem towards digital payments.

Key Findings

The research found that digital wages can bring efficiencies in the garment supply chain that benefit both employers and workers. Factories are benefiting from digital wage payments, which reduces the need for factory staff to secure and disburse wages in cash. Paying wages digitally also requires factories to fully digitize their payroll system, which could help with audits and compliance requirements of buyers. However, introducing digital wages does entail a per capita fee paid to FSPs that facilitates the payment of wages directly into each worker's account.

¹ EuroCham Cambodia. 2018. "Garment Industry in Cambodia." Netherlands Embassy: Bangkok.

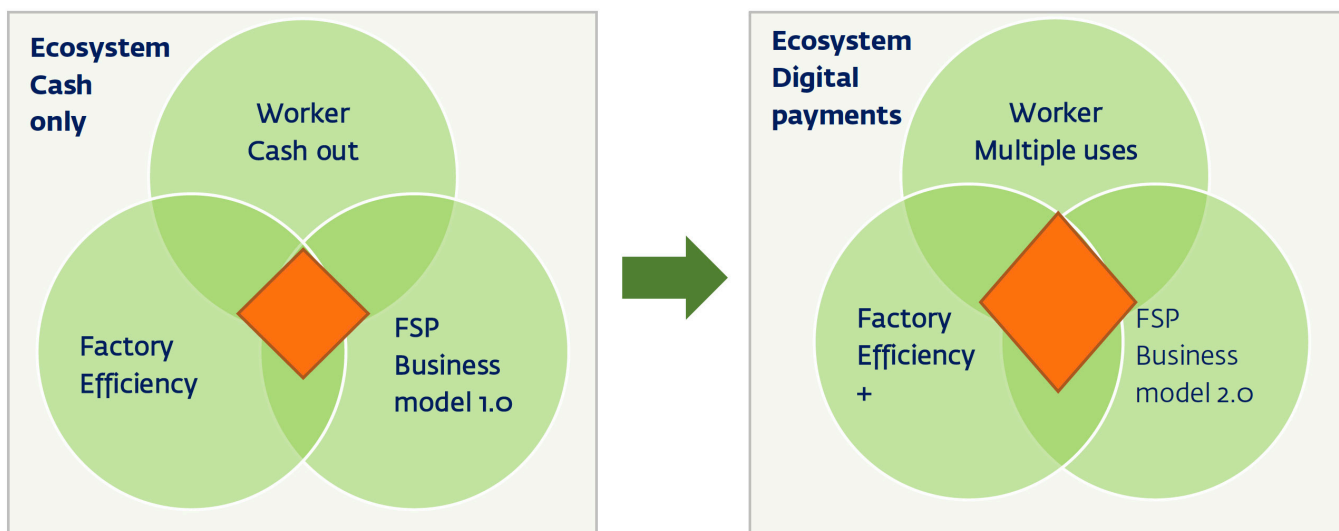
The key findings from the surveys are:

- **Factories paying digital wages reported a high degree of satisfaction with digital payments.**
- **Factories paying digital wages have consequently become more conscious of the hidden costs of payroll. As a result, they reported higher costs of paying cash wages before switching to digital wages, compared to the costs reported by factories currently paying cash wages.**
- **Findings from the factory case studies suggest that paying digital wages results in savings on payroll costs. The actual savings vary by factory size and type of employment.**
- **The share of workers paid digitally vary by region and is significantly higher in Phnom Penh.**
- **The two FSPs who currently dominate the digital wage payments market (Wing Bank and ACLEDA Bank) have different business models, which offers choices for employers and workers. Both offer a smartphone app, debit cards and retail merchant POS devices, providing garment workers with access to a range of financial products and services.**
- **About 70% of workers who are paid into mobile money accounts withdraw all wages on payday, compared to about 20% of workers paid into bank accounts. This is likely explained by the difference in “cash-out” fees from different FSPs.**
- **Some transactions undertaken by workers are ripe for digitization:**
 - **Almost two-thirds of workers (65%) reported sending person-to-person transfers but less than 10% send the money digitally.**
 - **About half of workers (47%) reported receiving transfers from family but only about 10% of these reported receiving the money digitally.**
 - **Over 90% reported paying some type of bills but almost all such payments are done in cash.**
- **Almost all workers (both male and female) have access to the internet through a smart phone.**
- **Local businesses serving workers prefer cash payments, including for rent and food.**
- **Unions at the federation level interviewed for this study recommend digital payments due to increased transparency.**

The research shows that there is potential for workers to benefit from digital financial services. However, the current wage digitization process in Cambodia’s garment sector results in fairly limited use of digital financial services by workers. Workers that are paid into bank accounts generally use their accounts to save a portion of their income between pay checks and for longer-term goals. Research finds that such savings habits can lead to higher total savings and improved financial health. However, workers paid into a mobile money account typically cash out their entire wages on payday. Regardless of the account type, workers are not using their accounts for any other payments, such as to pay merchants or landlords, or to send money to family. This presents a missed opportunity for workers to benefit from digital financial services.

Even with this limited use of digital financial services, the current digital wages system creates enough of an overlap in the interests of workers, factories and FSPs to enable the use of wage digitization. Furthermore, the conditions exist to expand the use of Digital Financial Services (DFS) by workers in a manner that benefits all stakeholders. The two main FSPs are set up to provide digital financial services through a mobile app and/or a debit card and they may be able to shift from their current Business Model 1.0 to 2.0 (see figure below). The mobile app enables users to conduct a wide variety of

Overlapping interests of stakeholders



transactions without needing to cash out. As a result, the scope of wage digitization could be widened by providing workers with sufficient information, skills and the confidence to install and use an app to manage their digital wage account and/or acquire and use a debit card. This would allow workers to shift from a cash-out use of their digital wage account to multiple uses.

However, barriers may still exist for workers to use the app, such as a reluctance to download an app on a smartphone that may have limited memory, the cost of data to conduct transactions, or unreliable connectivity. Furthermore, it is unclear who would provide the information about the app and how they would provide that information. For example, factories would need to see the potential benefits (“Efficiency+” in the figure above) of providing the additional time and space in order for FSPs to provide further information about their apps and/or debit cards.

Cash may still feature strongly in the financial activities of many workers in the Garment sector, even if they decide to use an app or debit card. This is because many of their payees are still reluctant to accept digital payments. For example, workers who pay rent will still have to cash out to pay their landlord. And workers will still have to pay for their food and groceries in cash. However, the infrastructure does exist for easy micro-payments: payment providers in Cambodia are including QR code-enabled payment solutions into their apps. There are already more than 40,000 merchants with point-of-sale (POS) devices that can accept payments through debit cards. But retailers have to be willing to accept payments digitally.

Given these findings, the data suggest that there is already a market for digital wages in Cambodia, although one that is narrow in scope. But the technological infrastructure (smartphones, internet connectivity, apps, debit cards, and POS devices) exists to expand that scope and enable workers to make an informed choice about whether to use an app, debit card, cash, or a combination of these channels. A number of challenges are preventing workers from making these informed choices, but these challenges can be addressed.

This report recommends the following next steps to enhance wage digitization:

Build on what is already underway. The data in this report suggest that there is merit — and no downside—in continuing the process of digitizing wages. The research conducted identified 56 factories that have digitized their payroll system, with very high levels of satisfaction from most workers. As of the end of April 2021, Wing Bank was providing payroll services to 132 factories in the garment sector and about 157,000 active worker payroll accounts. As of May 2021, ACLEDA Bank was providing payroll services to 173 factories, with about 144,000 active worker accounts. According to these figures, about half of Cambodia’s garment factories are paying wages digitally, although the research was not able to ascertain whether digitization was concentrated in Tier 1 factories or spread across all types of factories in the sector. To ensure that all factories have the opportunity to digitize their wage payments, the Garment Manufacturers Association in Cambodia (GMAC) could consider surveying its members to identify which factories have digitized and which have not. GMAC could subsequently share those findings with stakeholders, including FSPs who can then develop a strategy to reach all factories.

Ensure responsible digital wage payments. Workers should have access to appropriate payroll tools, product and fee transparency, and a fair recourse system for dealing with complaints about digital payments. Factories and FSPs should also ensure the protection of worker’s identity, payroll, and financial data. Payment information is increasingly being used for marketing and credit scoring. Alternative data has the potential to offer workers access to formal credit and other financial services, but it also raises cybersecurity concerns.

Provide support for workers to gain full benefits from wage digitization. The data in this report suggest that workers are not using the full functionalities of their digital payroll accounts such as saving or sending/receiving remittances. Financial capability training and support (knowledge, skills, attitudes, and behaviors) is vital to maximizing the benefits of the transition to digital wages. To ensure that the transition is sustainable and inclusive, it is important that FSPs and other relevant stakeholders provide employers and workers with information, guidance, and advice that consider the needs of workers, particularly women, throughout the process. Such support should also account for the reality that most workers, despite having smart phones lack awareness about the use of the Internet and apps and the associated risks surrounding privacy and security.

Stakeholders, including FSPs, global buyers and employers, should explore scalable and engaging ways to provide support and disseminate appropriate and relevant information with male and female workers about how to use and benefit from their new payroll accounts. BSR HERproject, Better Factories Cambodia and others have already developed open-source digital wages materials for managers and workers (see Annex).

Encourage merchant payment digitization. The commercial viability of payroll accounts is a challenge to FSPs. The current business model of payroll accounts is fees earned through cash-in/cash-out facilities. The business models at FSPs will need to evolve to encourage financial transactions to remain digital and for workers to make many transactions during the month, including for purchases. The digitization of garment factories’ payroll may provide FSPs with a test case on how to manage this transition with a small, but important, segment of the population.

Foster competition. Factories in Cambodia do not allow workers to choose their payroll account provider — they receive their salary into an account chosen by the factory. In the long run, competition for customers encourages FSPs to design better products and maintain lower prices. Therefore, factories should aim to move beyond direct contracts with FSPs and towards working with a digital payroll service that can deposit a worker’s wages in any bank or Fintech account.

Introduction

This report presents the results from research that was conducted in Cambodia in December 2020-January 2021. The focus of the research was on the potential market for worker payroll digitization, through direct payroll deposits into workers' financial accounts (henceforth "digital wages"), in Cambodia's garment sector. The research sought to understand the interests and concerns of the three main stakeholders in this market—male and female workers, factories, and financial service providers (FSPs). In order to fully understand the potential benefits and challenges that a shift to digital wages might present to workers, the research also considered the context of the ecosystem that includes other economic actors, with a particular focus on those who conduct transactions with garment sector workers.

Digital wages are still relatively rare in emerging markets. In low- and middle-income countries, about a quarter of adults on average work in the private sector, according to the World Bank's Global Findex database, with less than half of them receiving their wages digitally. A large percentage of factories pay workers in cash in Cambodia's garment sector, which accounts for about 40% of the country's GDP and 80% of its export earnings. During the pandemic, many factories adopted digital payments in order to receive government payments and pay their workers digitally.

Paying workers in cash creates administrative costs for businesses, while digital wages can improve efficiency. A study of Bangladesh's garment industry found that paying workers in cash—which requires removing workers from the production line to collect pay packets—resulted in 750 lost production hours per month in a typical factory. Cash wages also require additional expenditures such as hiring security guards to protect paper currency and administrative staff to tally up each workers' compensation. When factories switched to digital wages, the time required to disburse wages fell by 32-80%, depending on the digital payment type, while cost savings ranged from 45-85% (Better Than Cash Alliance 2017). A case study on the global garment retailer Gap found that supplier factories spent about one hour per worker per month paying wages in cash. After switching to digital wages, the time savings were equivalent to having 16 additional full-time workers per month, while human resources departments reported monthly time savings of 25% (Better Than Cash Alliance 2018). Research on public-sector payment programs also shows that digital payments can reduce administrative costs (Aker and others 2016; Muralidharan and others 2016).

Digital wages have a range of benefits for workers, including helping them to build savings, as recipients often keep the money in their accounts rather than spending it. In Afghanistan, workers who automatically deposited part of their salary into a mobile savings account had higher savings and financial security than workers who received a mobile savings account but did not sign up for automatic deposits (Blumenstock and others 2018). In India, weekly payments resulted in significantly higher savings for a group that received the payments into accounts than those that received them in cash (Somville and Vandewalle 2018). Digital wages can especially benefit women. In India (Field and others 2019) and South Africa (Biljon and others 2018), digital payments increased women's labor force participation and helped shift gender norms by strengthening their control over their finances.

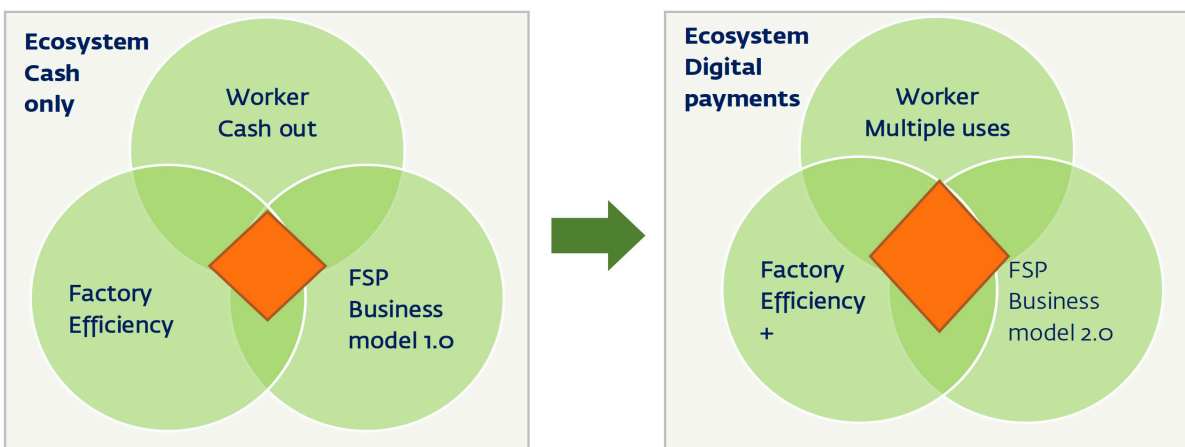
Digital wages can also help unbanked adults gain access to financial services, especially for women who make up the majority of the garment sector. Globally, about 200 million adults opened their first bank account specifically to receive wage payments from a private sector employer, according to the World Bank 2017 Global Findex database. Yet digital wages do not automatically drive digital financial inclusion for workers. This is particularly true for women who often have more difficulty accessing financial accounts and gaining the confidence to use them. These challenges can result in workers withdrawing their entire salary in cash instead of using digital financial services, or even handing over control of their accounts to others. For example, three years after rapid wage digitization in India and without any formal training included, research found that female and male workers were not benefiting from their accounts, and were mainly withdrawing their entire paycheck on payday.

There is also a gender gap in the use of the accounts, with 48% of women handing over control of their accounts to others, compared to only 7% of men (BSR HERproject and Microsave Consulting 2019). In Bangladesh, following rapid wage digitization as part of the government’s response to COVID-19, 17% of women interviewed for the Garment Worker Diaries did not know how to use their new digital payroll accounts due to lack of any training; 29% reported that the process of using digital accounts was too difficult (Ortega 2020). By contrast, both male and female workers who participated in HERfinance Digital Wages program² became active users of their digital payroll accounts. After being trained in Bangladesh, women conducted approximately eight transactions per month and men 13 transactions (BSR HERproject 2020). Research on garment workers in Bangladesh suggests that workers who receive digital wages learn to use digital financial services through experience. Over time, they conduct a wider range of transactions and learn to identify and avoid illicit fees (Breza and others 2020). Workers may also be more likely to use digital financial services if product offerings were cheaper and more convenient than cash.

Due to project constraints, it is likely that the sample of factories and workers interviewed for this project was an over-representation of factories that pay their workers digitally: half of the factories in the sample pay digital wages and half of the workers in the sample receive their wages digitally. However, this over-representation of factories/workers using digital wages provides an opportunity to gain a clear understanding of the current status of digital wage payments in Cambodia.

The results presented in this report can help stakeholders interested in promoting digital wages to better understand the extent of the overlapping interests and concerns of the three stakeholders most affected by digitization (figure 1). The results can also be used to identify how to expand the overlap in interests of these stakeholders to ensure that wage digitization is implemented responsibly and sustainably for all stakeholders.

Figure 1: Overlapping interests of stakeholders



² HERfinance Digital Wages program brings together global brands, their suppliers, local NGOs, and financial service providers to support employers to responsibly digitize wage payments and provide financial capability training for low income female and male workers in global supply chains, including in Bangladesh, Egypt and Cambodia.

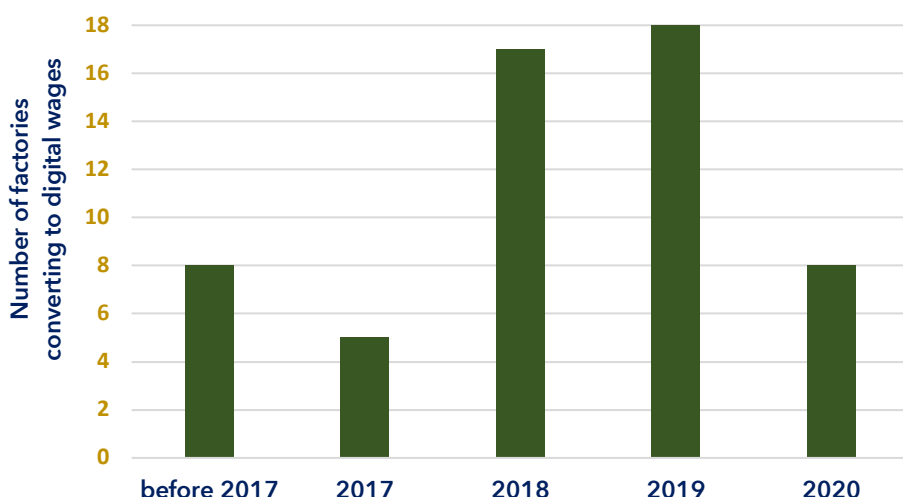
Factories

Methods and Sample Description

The research team interviewed representatives from 114 factories, 58 of which pay cash wages and 56 pay digital wages (fully or partially). Of the 114 factories, the team conducted more in-depth qualitative interviews with 32 factories (14 of which pay cash wages and 18 pay digital wages).

Among the factories that pay digital wages, the majority made the switch from cash in 2018 or 2019 (figure 2). The most commonly used digital payment providers were Wing Bank (chosen by 43% of the digital factories) and ACLEDA Bank (chosen by 39%). Only 7% had switched providers.

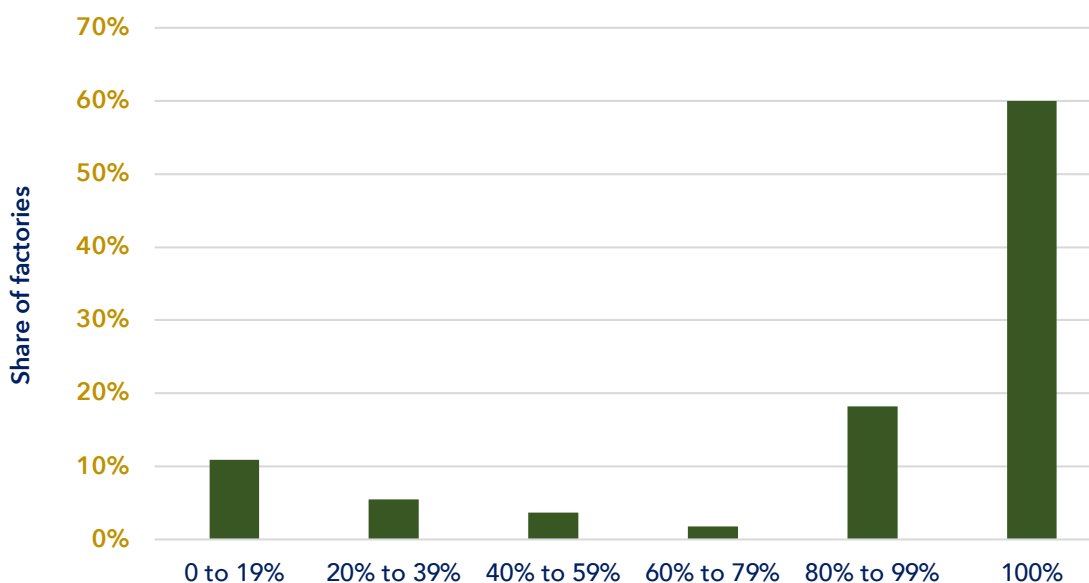
Figure 2: Factory conversion to wage digitization by year



Collectively, factories that now pay digital wages had a median of 630 permanent full-time employees and 149 temporary employees (82% of full-time employees were reported to be women and 77% of temporary workers were men). Factory management reported that nearly all male and female workers had access to a cell phone, and about 77% of both male and female workers own a smartphone. Of the factories that paid digital wages, 60% pay all their workers digitally and another 18% pay over 80% of their workers digitally (figure 3). On the other end, 10% of factories in the sample paid less than 20% of their workers digitally.

The breakdown between cash and digital factories in the sample nearly matches the breakdown between cash and digital factories that can be inferred from the figures provided by Wing Bank and ACLEDA Bank, as well as the total number of factories in the garment sector according to the Garment Manufacturers Association in Cambodia. Wing Bank and ACLEDA Bank combined reported providing payroll services to 305 factories in the garment sector and GMAC’s website reports about 600 factories in total in the sector, suggesting the same 50/50 split in both the sample and the total number of factories. Furthermore, based on the large number of digital factories in the sample (56 in total), one can draw insights into what other factories might expect if they were to digitize their wage payments.

Figure 3: Share of workers digitized



Costs of Cash Wage Disbursement

One important potential benefit of converting from cash wage payment to digital wage payment is the cost savings for factories. There are various costs associated with paying workers in cash, including costs for hiring security personnel during both wage disbursement and the transportation of cash to the factory, and costs for hiring accounting and administrative staff to prepare workers' individual pay packets and disburse them to workers. In addition, workers must stop work to collect their pay packets, leading to a loss in production time.

Some of these costs remain when a factory converts to digital wage payments, and some new ones emerge—most notably, payments to a financial service provider to make all the wage payments to workers' individual accounts. To better understand the impact of wage digitization on costs, the survey asked factory representatives (from both factories that pay cash and digital wages) about the costs associated with disbursing cash wage payments. For factories that currently pay digital wages, the questions focused on their costs before switching from cash to digital wages. In addition, the survey asked representatives about the costs of disbursing wages digitally.

Staff and security costs

In the qualitative interviews, the most common cost identified by factories was, by a large margin, the time spent on cash disbursement by a number of staff and supervisors during payday. In the quantitative survey, the distribution of the number of accounting staff and other staff and security involved in the disbursement of cash wages was very similar (see Appendix).

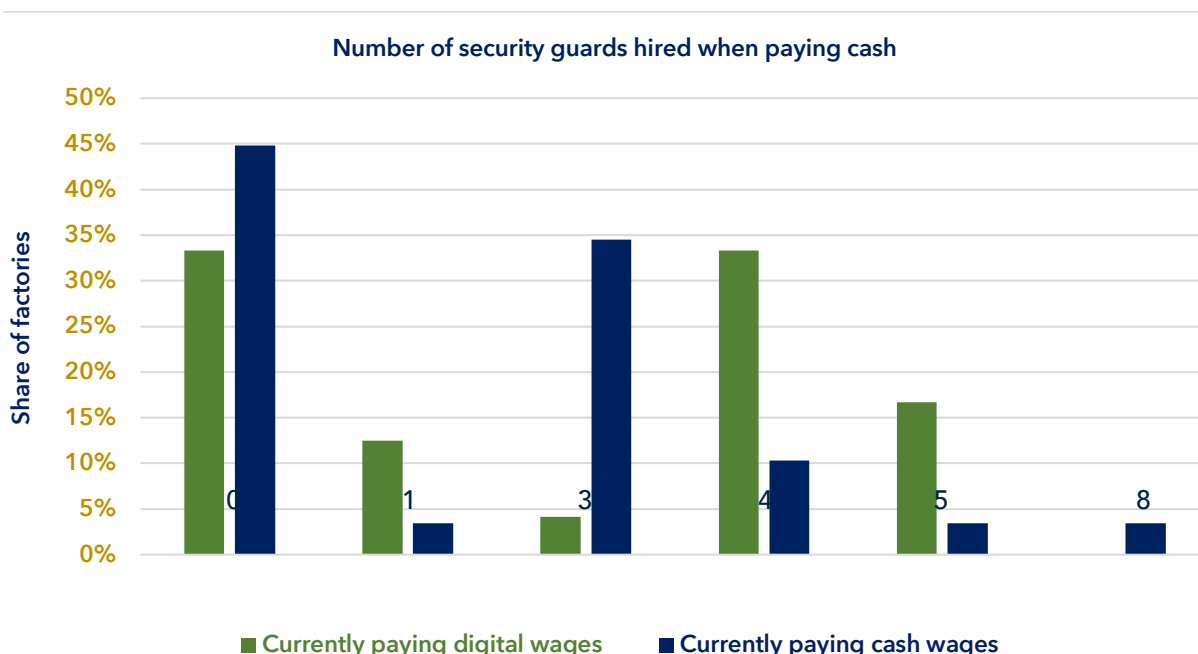
Factories also noted security costs, such as hiring guards to secure cash disbursement. However, some factories noted that they did not incur a security cost, either because the driver of the vehicle used to pick up the cash from the bank was also a security guard, or because the person responsible for withdrawing the cash had personal security. This was reflected in the answers to the quantitative survey where many respondents reported having no security costs for the transportation of cash (figure 4). The data also suggest that factories that now pay workers digitally

were likely to report higher transportation security costs when they were making cash wage payments than those currently paying wages in cash. Specifically, 44% of factories now paying wages digitally reported having three or more security guards involved in the transportation of cash, as opposed to 16% of factories currently paying in cash. However, factories noted little concern about stolen money or fraud during the disbursement of cash wages.

Loss of production time

When asked about the losses in production time due to workers having to take time off to pick up their pay packets, most factory representatives stated that it costs about an hour in lost production time. Specifically, the time lost does not indicate that a worker loses an hour of production time, but rather that there is an interruption or stopping of production for one hour on payday due to workers having to leave their stations to pick up their wages. Wing Bank executives in charge of signing factories up for its payroll service identified the cost of lost production time as a major factor in why factories sign up for their service. In the survey, factories that now pay digital wages were more likely than those that pay in cash to state that lost production time was more than one hour when they were paying in cash. Earlier research in Bangladesh estimated that each worker spent 18 minutes on average off the production line to receive their wages in cash every month, which equates to 750 hours of lost production per month for a factory with 2,500 employees (Better Than Cash Alliance 2017).

Figure 4: Number of security guards hired to transport cash when paying in cash

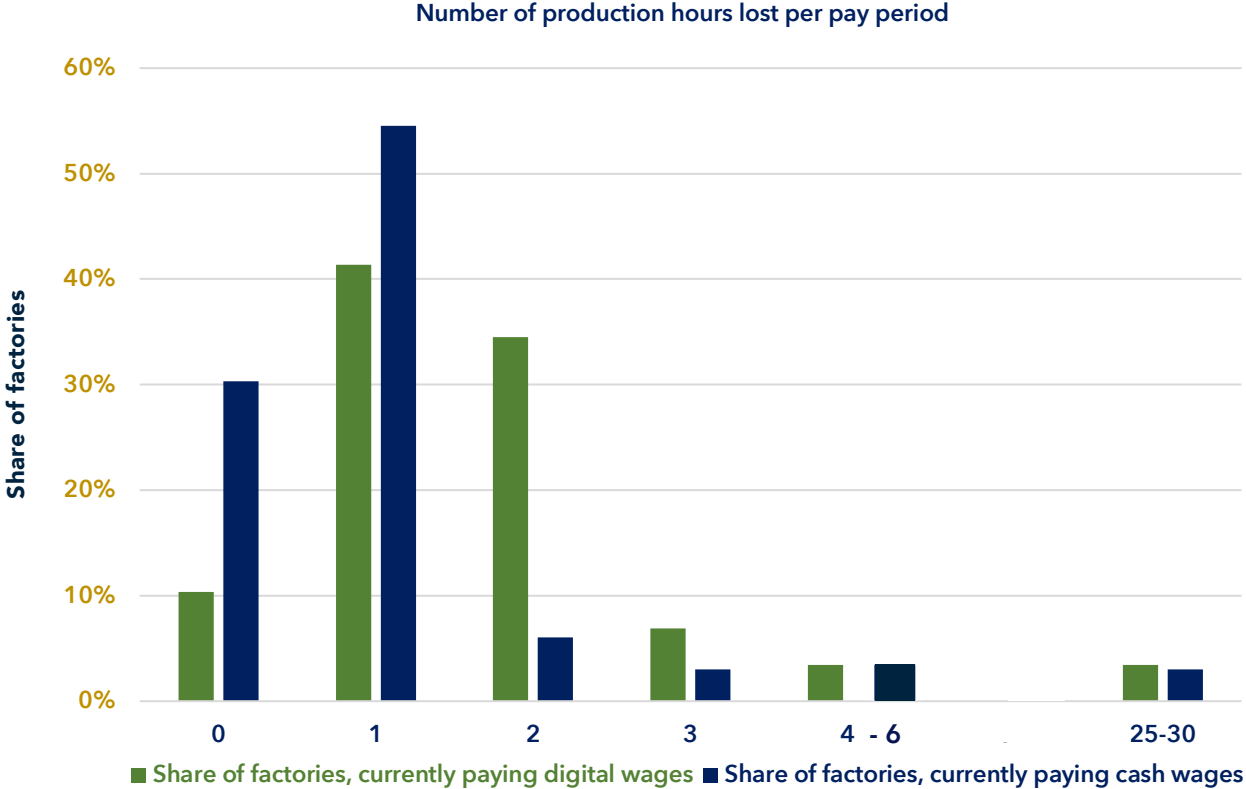


Cost Savings from Wage Digitization

During the qualitative interviews, all factories that are now paying digital wages reported a reduction in their overall costs. While staff are still required to address worker complaints and issues related to digital payments, particularly when the FSP call center is busy (which appears to be a recurrence), the number of staff required to do so is much less than the staff required to process cash payments. Normally, only one or a “few” staff are dedicated to addressing complaints. Furthermore, these staff do not spend a lot of time on addressing complaints since in most cases, workers are directed to their FSPs if they have questions or problems. This is one of

the reasons why some factories noted that “one hour of leave” that is given to workers to go to the bank to address these issues poses an additional cost. Unlike in the case of cash wage disbursements, this one hour of leave did not apply across the production, but only to those workers who encountered an issue with their digital payment. These responses were confirmed in the quantitative survey as well.

Figure 5: Lost production time, in hours per pay period



The data from the surveys also suggest that fewer accounting staff are needed to process payroll in factories that make digital payments to nearly all their workers (90% or more). Of the 32 factories that responded to this question, 25 paid 90% or more of their workers digitally, while seven paid fewer than 90% digitally. The former had two accounting staff on average to manage payroll, while the latter had four. This difference remains, even after accounting for factory size.

The survey also asked factory managers a set of questions about the cost savings they experienced through wage digitization. While there may have been some misunderstandings regarding the questions, some factories provided useful data on the possible benefits of wage digitization, outlined in two case studies (table 1).

Both case studies are of factories that signed an agreement with ACLEDA Bank to provide them with payroll services. Under its Memorandum of Understanding with GMAC, the bank currently charges \$0.20 per payroll transaction (\$0.40 per month per worker). By contrast, Wing Bank charges \$0.35 per payroll transaction (\$0.70 per worker per month). If needed, ACLEDA Bank will also install an ATM machine on the factory premises. This report assumes that the set-up costs reported by these two case studies are for one or two ATMs. Based on these numbers, Factory 1’s total monthly costs to pay all 2,000 of its workers is \$800. By contrast, Factory 2 incurs costs of \$319 per month to pay 797 of its 885 workers—not all workers are paid digitally.

Factory 1 reported incurring cash payroll costs of about \$1,300 per month, while the smaller Factory 2 reported cash payroll costs of about \$959 per month. Factory 1 was benefiting from some economies of scale when paying in cash—its cost to administer cash payroll per worker was \$0.65 per month, while Factory 2 incurred a cost of \$1.20 per worker per month. As a result, on a per worker basis, Factory 2 saved more money (\$638 per month) from going digital than Factory 1 (\$500 per month), taking into account that both paid ACLEDA Bank the same monthly fee per worker after digitization.

However, Factory 1 broke even in less time than Factory 2 due to lower set up costs—something that cannot be explained by this research. Furthermore, once the possible loss of production time is factored in, Factory 1's time to break even shortens more quickly. Paying wages digitally means that workers do not have to leave the production line to pick up their wages—they cash out after work is over. Assuming that (i) the typical worker takes about 15 minutes³ to obtain their cash pay envelope and return to their work station, and (ii) the average pay is about \$250 per month (\$1.20 per hour in a 26-day month with 8-hour days), then the average cost of cash payroll payments due to lost production time is about \$0.30 per pay period or \$0.60 per month (workers get paid twice a month in Cambodia). For Factory 1 this translates into savings of about \$1,200 per month for a total of \$1,700 per month, while for Factory 2 it translates into an additional savings of about \$478, for a total of \$1,116 per month.

These case studies suggest that there are a lot of factors that impact where savings from wage digitization come from. But these savings can be realized if a sufficient number of workers accept the shift to digital wage payments. In fact, factory managers were all in consensus that a key factor for them to undertake the wage digitization process was how easily workers would be able to cash out the pay deposited into their accounts.

³ Fifteen minutes is a conservative time estimate, as one case study by a global retailer found that supplier factories spent about one hour per worker per month paying wages in cash (refer to the Introduction section).

Table 1: Two factory case studies: potential savings from wage digitization

	Factory 1: Large factory with permanent workers	Factory 2: Smaller factory with permanent and temporary workers
Number of workers	2,000 (85% female)	885 (85% female) (677 permanent, 208 temporary)
Monthly payroll outflow	\$500,000 (based on \$250 in wages per month/worker)	\$221,250 (based on \$250 in wages per month per worker)
COST OF DIGITAL PAYROLL:		
Digitization set-up fee	\$5,900	\$10,000
Average direct cost of digital payroll per worker/month	\$0.40 (based on a \$0.20 transaction fee twice a month)	\$0.40 (based on a \$0.20 transaction fee twice a month)
Total monthly direct cost for digital payroll	\$800 (based on 2,000 workers)	\$319 (based on 797 workers paid digitally)
COST OF CASH PAYROLL:		
Average direct cost of cash payroll per worker/month	\$0.65	\$1.20
Total monthly direct cost for cash payroll	\$1,300 (based on 2,000 workers)	\$959 (based on 885 workers)
DIRECT SAVINGS FROM CONVERTING FROM CASH TO DIGITAL PAYROLL:		
Direct savings per worker/month	\$0.25	\$0.80 (per worker paid digitally; no savings for those still paid in cash)
Direct total savings per month	\$500	\$638 (based on 797 workers paid digitally)
TOTAL SAVINGS FROM CONVERTING FROM CASH TO DIGITAL PAYROLL (ACCOUNTING FOR PRODUCTION LOSSES):		
If production losses are 15 minutes/worker during cash disbursement per payday, equivalent of \$0.30 per pay period, or \$0.60 per month then:		
Total savings per worker/month	\$0.85	\$1.40 (per worker paid digitally)
Total savings per month	\$1,700	\$1,116 (based on 797 workers paid digitally)
Break-even point	Under 4 months	Under 9 months

Satisfaction and Popularity

All digital factory representatives interviewed reported being satisfied with the digital payment service; they believed that the shift from cash to digital wage payments was convenient for both the factory and the workers and they noted experiencing very few technical issues or delays. The only challenge factories reported was related to ATM liquidity on payday: sometimes ATMs did not have sufficient funds on payday because workers at other nearby factories were getting paid on the same day.

The results of the qualitative interviews were corroborated in the quantitative survey results. For example, factories expressed a high level of satisfaction with the cost of the service, ease of account provision and maintenance, the speed of resolving technology issues, assistance with training of workers in the use of the digital accounts, and the availability of places where workers could cash out their wages (ATMs or agents) (table 2). Factories were less satisfied with the fees charged to workers. There was also some indication that technical difficulties are one of the risks of adopting a digital wage system, although such issues are reportedly rare — they happen around once a year. Even so, a technology failure can prove to be highly disruptive, even when it is resolved quickly, because it affects all workers at the same time and its resolution is out of the factory’s control.

Table 2: Levels of factory satisfaction

Service	Share of satisfaction among factories
Cost of service (for the factory)	95%
Ease of account provision and maintenance	89%
Speed of resolving tech issues	89%
Assistance with training	87%
Availability of ATMs and cash out points	87%
On-site assistance with withdrawals	76%
Cost and fees for workers	71%
Cost of resolving tech issues	61%
Disruption in wage payment due to tech issues	42%

Preferences and Concerns

The team surveyed factories that have already digitized about what aspects of wage digitization they would consider to be important. Although there is some indication that factories can save money through wage digitization, the cost of accounting and transaction services for the factory was rated as “very important” by only two-thirds of factories that had already digitized. Based on the survey responses, the most important factors to consider when making the switch to digital wages were related to facilitating cash-outs by workers: 81% reported that the availability of ATMs or cash outs near the factory is “very important;” and 89% reported that the size and reach of the provider’s network of branches and ATMs across Cambodia is “very important.”⁴

Other important considerations were related to technology and solving technical issues:

- 86% of the digital factories considered the ease of administering and accounting payments to be “very important.”
- 83% considered the speed of resolving technical issues to be “very important” and 61% considered the cost of resolving such issues to be “very important.”
- 78% considered the technical reliability of technology to be “very important.”

Finally, consistent with the concern for workers’ ability to cash out easily, 73% of factories rated making sure the technology is easy to use and popular among the workers as “very important.” In addition, just over half rated the cost of accounting and transaction services for the workers and the availability of on-site assistance with account withdrawals for workers to be “very important.”

Training and Factory Perceptions of Worker Attitudes

It is evident that factories are not very concerned or involved in the training of workers to use digital financial services. Only 9% noted that staff from the factory or parent company were involved in any type of training for workers. Staff from the bank or the mobile money provider almost always provided such trainings to workers, which is to be expected since all digital factories noted that trainings were included in the contract with their digital wage payments provider.

⁴ As noted by Ken Loo, Secretary General of the Garment Manufacturers in Cambodia (GMAC), factories cannot mandate that workers accept their pay digitally. Therefore, factories have an incentive to ensure that cashing out is as easy as possible for its workers.

Factories generally felt that workers accepted the digitization of their wages:

- 66% of digital factories reported that resistance from workers was “not a problem at all” and 71% believed the same about resistance from labor unions, merchants or moneylenders.
- In terms of cost, 81% reported that the costs to the worker were “not a problem at all” or “not really a problem.”
- However, 45% noted insufficient financial literacy and 42% noted insufficient worker awareness about benefits of having an account as “somewhat a problem.”
- Yet, 86% of digital factories believe that insufficient training provided to workers is “no problem at all” or “not really a problem.”

These results suggest that there is a disconnect between what factories think is necessary for workers to learn about their accounts and benefit from them and what they think is sufficient for workers to learn in order to receive their wages without any problems. A similar disconnect exists from the perspective of workers.

Financial Service Providers (FSPs) Business Models

There are a few providers of digital wage solutions in Cambodia, with Wing Bank and ACLEDA Bank being the two most prevalent. Wing Bank provides digital payroll solutions to 132 factories in the garment sector, with about 157,000 active worker accounts, while ACLEDA Bank services 173 factories in the sector, with about 144,000 active worker accounts.⁵

Financial service providers have different customer service business models.⁶ The two most common business models are i) the agent-based model that uses mobile money account platforms (e.g., Wing Bank) or ii) the branch and ATM model that use bank account platforms (e.g., ACLEDA Bank). Financial service providers charge a transaction fee per payroll payment per worker. Given that Cambodian law requires garment factories to make two wage payments per month, therefore transaction fees are charged twice per month.

FSPs that focus on the agent-based model, usually charge customers to withdraw cash out of their accounts, which incentivizes workers to cash out their full salary at once, unless they plan to initiate a non-cash transaction directly from their account (garment workers get one free withdrawal per pay period, after which they pay withdrawal fees). Under this model, workers usually cash out fully through an agent, and then work with that same agent to perform an over-the-counter service such as paying a utility bill or transferring money to a family member in another province.

Although workers could perform digital transactions on their own through the FSP’s mobile app without cashing out, the data suggest that they do not. According to our interview with Wing Bank, only 17% of workers with payroll accounts use the app and data from the workers’ survey are consistent with this finding (see next section on “Workers”). Workers may consider it easier to work through an agent rather than download the app onto their phone, set up their account, and learn how to use it to make transactions. Furthermore, the agent has no incentive to teach an accountholder how to install and use the app because they will lose that accountholder’s over-the-counter business. And finally, workers trust the agents and are more comfortable transacting through them than using an app on their own, where they risk making an error that may cost them money.⁷ In sum, the current business model of the agent-based model provides workers a set of digitally-enabled services that are scarcely used. Instead, workers prefer to cash out through an agent that provides over-the-counter financial services.

⁵ Based on information provided by Wing Bank and ACLEDA Bank representatives on May 19, 2021 and May 24, 2021, respectively.

⁶ According to Clay Christensen of Harvard Business School, a business model consists of four elements: a customer value proposition, a profit formula, key resources and key processes.

⁷ Based on an interview conducted with Wing Bank executives. April 30, 2021.

FSPs that focus on the branch and ATM model, usually allow for free withdrawals from their ATM machines (some charge an annual fee for debit cards), resulting in less incentives for workers to withdraw their full salary from their account once they are paid. These FSPs enable customers to accumulate balances in their accounts, which FSPs can intermediate and use to generate revenue. Workers can initiate bill payments but only through the FSP's mobile app, except in the case of EDC electric bills in Phnom Penh and Kandal provinces, which can be paid through an ATM. In addition to paying bills, workers can also transfer money through the FSP's mobile app to other people and organizations⁸ and use their debit card to make payments for merchants with POS devices.⁹ In this way, these type of FSPs offer workers the ability to perform a wide range of digital financial transactions, but only through digital channels such as a mobile app or debit card. Until workers learn how to use these tools, which is a challenge, the FSP's ability to offer workers a full suite of transaction services is limited.¹⁰

Interoperability — where FSPs allow for the transfer of money from one provider to another — is key to facilitate the uptake of digital transactions. Wing Bank and ACLEDA Bank, for example, have made their products interoperable so that users can freely send each other money through either platform.¹¹

Furthermore, both providers offer the ability for customers to perform a number of transactions via a mobile app (i.e., transfers to other people, bill payments, and merchant payments, including QR-code enabled payments) and to pay for goods and services with a debit card. In both cases, the technical infrastructure exists for a cashless payment system.

While there is room for improvement in how the providers interact with their customers, the business models of digital wage solutions providers in Cambodia *currently* offer workers in the garment sector different ways to access financial services, especially payment services.

8 https://www.acledabank.com.kh/kh/eng/cu_toanchetpartner.

9 https://www.acledabank.com.kh/kh/eng/ps_ebacledapos.

10 Based on written feedback received from ACLEDA, May 18, 2021

11 <https://www.wingmoney.com/en/acleda-wing-launch-fund-transfer-payment-services/>.

Workers

Factories that are now paying digital wages reported a high degree of satisfaction with their new payroll system. However, their primary concern remains ensuring that workers continue to have a smooth cash-out experience. The two main FSPs providing digital wage services have different business models that establish different incentives for how workers use their digital wage account. This section further explores workers' experiences with digital financial accounts and services, and with digital wages.

Sample and Demographics

The research surveyed a total of 413 garment workers, 82% of whom are women. The survey targeted workers in different regions of Cambodia that have concentrations of garment factories: Kampong Speu, Kandal, and Phnom Penh. 86% of workers are from one of those regions, while 14% are from other regions. The median age of the workers surveyed was 28 years old and the median years of work experience in the sector was six years (five years for men and seven for women). Male workers reported a higher level of education, with 80% of them reporting "some secondary" education or more, compared to 48% of women citing the same.

Just under 40% of workers are renters, 35% live in a house owned by another family member, and 24% live in a home that they own. Renters were far more likely to live in Phnom Penh than in any other region. Almost all workers (92%) reported being able to access the internet through their smartphone.

Method for Receiving Wage Payments

Just over half (52%) of workers reported being paid digitally, and the rest reported being paid in cash, with nearly all being paid twice a month. Of those paid digitally, 51% receive their pay through a mobile money account—almost all of which are Wing Bank accounts. The other half receive their digital wages in a bank account—almost all of which are ACLEDA Bank accounts. The majority of workers paid digitally (92%) reported receiving all other payments digitally as well (i.e., bonuses, overtime pay, etc.) which suggests that once a factory "goes digital," it does so fully.

There is a regional bias in who is paid digitally. Over three-fourths of workers in Phnom Penh are paid digitally (either through a bank account or mobile money account), while about half are in Kandal (table 3). In Kampong Speu, one-fourth of workers are paid digitally.

Table 3: Share of workers receiving wages by payment method and by region

	Kampong Speu	Kandal	Phnom Penh	Other Regions
Cash wage payments	75%	48%	22%	60%
Direct payment into bank account	6%	26%	34%	40%
Direct payment into mobile money account	19%	26%	44%	0%

Of those workers paid digitally, 45% reported that they withdraw their full salary in cash each pay period, while 55% reported keeping some money in the account. The extent to which workers withdraw their money depends heavily on the type of digital wage account they have: 21% of workers that receive their wages into a bank account reported withdrawing it fully each pay period (table 4). By comparison, 69% of those receiving their wages into a mobile money account report withdrawing the full amount each pay period.

Table 4: Salary withdrawal by digital wage payment method

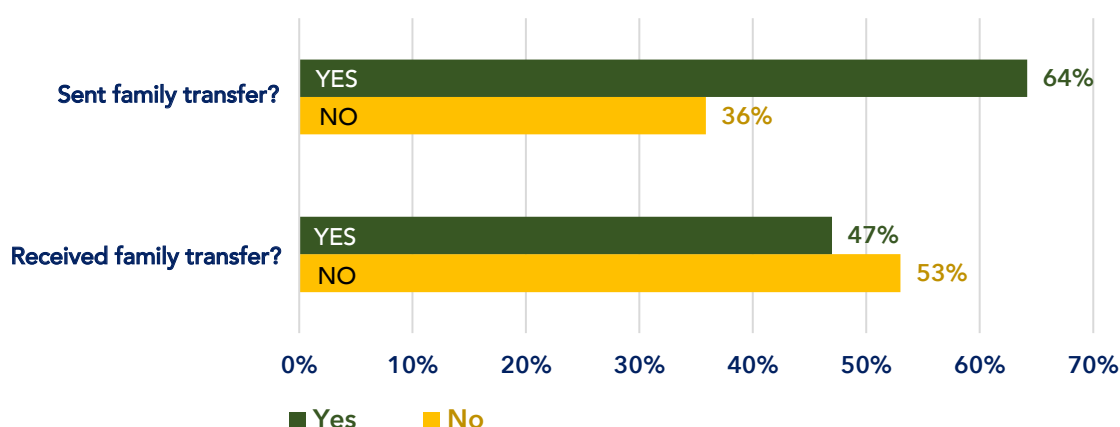
Digital Wage payment method	Withdraw full salary	Keep some money in account
Direct wage payment into bank account	21%	79%
Direct wage payment into mobile money account	69%	31%

These salary withdrawal behaviors support the differing business models of the two major digital wage providers. They are also consistent with data reported by Wing Bank executives who estimated that workers were withdrawing about 80% of their salary in cash in the days after payday. ACLEDA Bank executives also confirmed that workers generally cash out within a few days of payday. Invariably, workers paid through a bank account use an ATM to withdraw their salaries, while those paid through a mobile money account reported using an agent. Only 9% reported ever having trouble withdrawing money on payday. And almost all (95%) reported having a convenient agent or ATM for withdrawing their salary.

Transfers To and From Family

The most common type of digital transaction performed by a worker in the garment sector in Cambodia is a money transfer to another family member. More than half of the workers interviewed reported receiving a transfer from a family member in the preceding three months, while 64% reported sending one (figure 6).

Figure 6 Share of workers sending and receiving family transfers in the past three months



Workers paid digitally reported performing all their transfers in cash, even when ACLEDA Bank and Wing Bank provide money transfer services that can be initiated through an app or at an ATM. These cash transactions almost certainly include over-the-counter transactions with an agent to whom the worker provides the cash to then initiate the transaction. For example, nearly all workers paid digitally still transfer money to their families in cash, as well as receive family transfers in cash (tables 5 and 6).

Table 5: Share of workers sending a transfer to family by transfer method

Digital Wage payment method	Method of transferring money to family	% Sending transfer to family
Direct wage payment into bank account	Cash	91%
	Digital	4%
	Both	5%
Direct wage payment into mobile money account	Cash	98%
	Digital	1%
	Both	1%

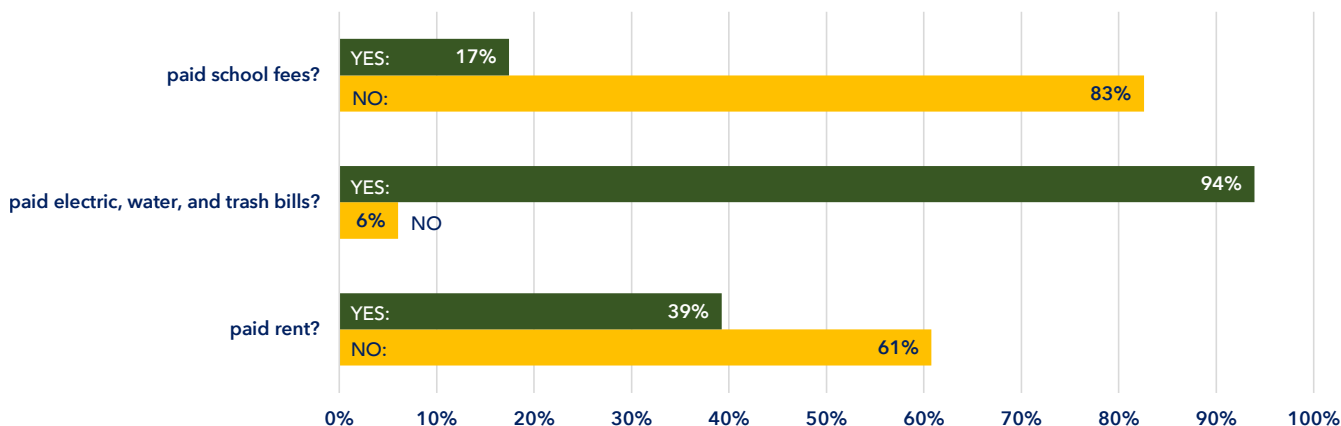
Table 6 Share of workers receiving a family transfer by transfer method

Digital Wage payment method	Method of transferring money to family	% Receiving transfer from family
Direct wage payment into bank account	Cash	91%
	Digital	5%
	Both	5%
Direct wage payment into mobile money account	Cash	99%
	Digital	1%

Workers’ Spending Habits and Loan Access

The survey asked workers about some important transactions they might make based on insights from the Garment Workers Diaries study conducted in Cambodia in 2016 and 2017. The focus was on rent, utility bills, and school fees—all important transactions that vary in prevalence and size. About 39% of the workers surveyed paid rent, while almost all paid some sort of utility bill, but only 17% paid school fees (figure 7).

Figure 7: Share of workers performing transactions



Workers were also surveyed on whether they performed these transactions in cash or through some type of digital transfer. Workers reported conducting almost all transactions in cash. Only one out of 161 rent-payers pays rent digitally, two out of 71 workers that pay school fees do so digitally, and seven out of 386 utility bill-payers pay the bills digitally.

A total of 186 (or 45%) of workers reported having a loan, most commonly from a bank or a microfinance institution. There is a significant regional difference in the rate of borrowing, with only 20% of workers in Phnom Penh reporting they had an outstanding loan, while 66% of workers in Kampong Speu did, and about half of the workers in Kandal. The vast majority of the loans are received and repaid in cash—only four workers reported receiving a loan into an account and only three workers reported repaying a loan directly into an account.

In conclusion, the data suggest that very few workers conduct digital transactions, even though many of them who are paid digitally keep some money in their accounts after they have been paid.

Attitudes towards Digitization

The survey asked workers about the potential or actual opportunities that come from being paid digitally, as well as any concerns. The responses from workers that are now being paid digitally were similar to those currently paid in cash. In terms of opportunities, workers emphasized safety and the benefits of being able to save more (box 1). On the other hand, they identified long queues at ATMs and agents as their most pressing concern.

Box 1: Worker attitudes towards digital wages

Workers paid in cash	<p>Main opportunity if paid digitally instead of cash: "I [would] feel safe and not worry about losing money"</p> <p>Other opportunities:</p> <ul style="list-style-type: none"> • Ability to save money
	<p>Main concern if paid digitally instead of cash: "I am only afraid of a lot of people coming to withdraw their wages at the same time."</p> <p>Other concerns:</p> <ul style="list-style-type: none"> • Travel distance to nearest agent or ATM • Lack of knowledge about how to use a digital account
Workers paid digitally	<p>Main benefits: "Easy and safe. I can withdraw anytime I want, or I can save."</p>
	<p>Main concern: "Many people come to withdraw at the same time."</p> <p>Other concerns:</p> <ul style="list-style-type: none"> • Technical problems with card

When asked about their attitudes towards digital wages, over 40% of workers who are currently paid in cash would feel "uncomfortable" or "very unhappy" if they were forced by their factory to be paid digitally, while only 20% would be "very happy" or "comfortable."

Workers were also surveyed about the importance of receiving training in a number of different aspects of digital financial account use, including: knowing how to keep money safe in an account, what to do if they lose their cards or mobile phones, how to withdraw, how to check their balance, how to make a bill payment, how to maintain control of the account or save money in the account, or how to transfer money or keep their account information private. Less than half of the workers responded that knowing these things is either "very important" or "important."

Workers' Ecosystem

The team conducted 41 interviews with four different types of businesses: cooked food vendors, large goods sellers, retail merchants and landlords. Just under half reported having a digital account, with almost all large goods sellers having an account, while only one cooked food vendor did (table 7).

Table 7: Number of workers performing transactions

Type of business	Has digital account	Does not have digital account	Total
Cooked food	1	10	11
Large goods	8	1	9
Retail merchant	6	6	12
Landlord	3	6	9
Total	18	23	41

Almost all businesses reported receiving customer payments in cash at the time of purchase, although some large goods vendors reported selling their goods on credit and receiving credit repayments in cash. Almost all also reported paying suppliers in cash at the time of purchase.

There is little data related to the experiences these businesses have with accepting and making digital payments. But some telling data exists on the possible uses of digital payments by workers when interacting with each of these types of business. The most striking is that landlords reported receiving about 80% of their rent payments in one week in a month, and the number of rent payments collected each month ranges from 340 to 1,250, which is surprising given that the landlords likely collect these payments themselves. Cooked food vendors and retail merchants reported transactions in the range of 20-100 per day, depending on the type of day, while large goods vendors reported as little as two to about 20 transactions per day.

Due to the lack of data on businesses' experiences with digital payments, the team made inferences on what may occur if workers would receive their wages digitally instead of cash and if workers demand to make payments to the businesses digitally. In the former case, business owners did not think that workers being paid digitally would result in their wanting to make digital payments, largely because the businesses themselves were not keen on the idea of receiving digital payments. They stated it would be difficult and that either they or the workers would not know how to perform such transactions. Cooked food vendors also cited the very small amounts of their transactions as a reason for not switching to digital payments. Responses from various types of business also suggested a lack of trust in the digital payments system. For example, workers might not have the account balance to cover the cost of a digital payment. Some businesses noted that even if workers were paid digitally, workers would cash out and pay for things in cash, while other businesses stated that they simply prefer cash.

When asked how they would respond to a demand from workers to make digital payments, the cooked food vendors emphasized the fact that their sales involve very small amounts, while landlords simply asserted that they prefer cash.

Conclusions and Recommendations

The study's findings suggest that digitizing wage payments to workers in Cambodia's garment sector offers benefits to workers, employers (factory owners), and financial service providers. In particular, factories report cost and time savings after digitizing wage payments and are satisfied with the service.

Research and experiences in other countries demonstrate that digitizing wages has the potential to contribute to financial inclusion, particularly for women, who make up 80% of Cambodia's garment industry. The research also shows that thus far, digitizing wage payments has had limited impact on workers' use of digital financial services due to the lack of support and the financial capability (knowledge, skills, attitudes, and behaviors) needed to use payroll accounts and associated financial services. Although the survey responses from workers indicate that some workers paid into a bank account use their account to manage their money over the pay-period, almost all workers paid into a mobile money account cash out their wages in full on payday.

However, many opportunities exist for workers to benefit from digital financial services, such as sending money directly from their phone to family members and making bill and loan payments. In addition, the technological infrastructure (smartphones, internet connectivity, apps, debit cards, and POS devices) exists in Cambodia to expand workers' use of digital financial services. But workers need to be able to make informed choices about the use of an app, debit card, cash, or some combination of these channels to manage their money, and to be supported in their choices. This will entail increasing the awareness of workers about the functionalities of smartphone apps that can be used to manage a digital wage account, and providing them the information, skills, and confidence to install and use these apps. Furthermore, merchants, landlords, food vendors, utility providers, and other sellers also need to see the benefit in accepting digital payments.

Advancing a digital payments ecosystem that can also support digital wage payments can improve the efficiency of factories, the financial well-being of workers, and the market for formal financial services. What might be some next steps that stakeholders can take to promote wage digitization in a way that benefits male and female workers, and improves the overall market for digital financial services? While the limited amount of research conducted for this report does not lend itself to recommending concrete policies or practices, the research findings point to three general areas in which stakeholders might consider focusing their efforts on.

Build on what is already underway. The data in this report suggest that there is merit—and no downside—in continuing the process of digitizing wages. The research conducted for this report identified 56 factories that have digitized their payroll system, with very high levels of satisfaction from most workers. As of the end of April 2021, Wing Bank was providing payroll services to 132 factories in the garment sector and about 157,000 active worker payroll accounts. As of May 2021, ACLEDA Bank was providing payroll services to 173 factories, with about 144,000 active worker accounts. According to these figures, about half of Cambodia’s garment factories are paying wages digitally, although the research was not able to ascertain whether digitization was concentrated in Tier 1 factories or spread across all types of factories in the sector. To ensure that all factories have the opportunity to digitize their wage payments, GMAC could consider surveying its members to identify which factories have digitized and which have not. GMAC could subsequently share those findings with stakeholders, including FSPs who can then develop a strategy to reach all factories. Digital wage resources are available in Khmer to support managers and workers with the transition from cash to digital payroll, include learning tools, videos and posters (see Annex).

Ensure responsible digital wage payments. Workers should have access to appropriate payroll tools, product and fee transparency, and a fair recourse system for dealing with complaints about digital payments. Factories and FSPs should also ensure the protection of worker’s identity, payroll, and financial data. Payment information is increasingly being used for marketing and credit scoring. Alternative data has the potential to offer workers access to formal credit and other financial services, but it also raises cybersecurity concerns.

Provide support for workers to gain full benefits from wage digitization. The data in this report suggest that workers are not using the full functionalities of their digital payroll accounts such as saving or sending/receiving remittances. Financial capability training and support (knowledge, skills, attitudes, and behaviors) is vital to maximizing the benefits of the transition to digital wages. To ensure that the transition is sustainable and inclusive, it is important that FSPs and other relevant stakeholders provide employers and workers with information, guidance, and advice that consider the needs of workers, particularly women, throughout the process. Such support should also account for the reality that most workers, despite having smart phones lack awareness about the use of the Internet and apps and the associated risks surrounding privacy and security.

Stakeholders, including FSPs, global buyers and employers, should explore scalable and engaging ways to provide support and disseminate appropriate and relevant information with male and female workers about how to use and benefit from their new payroll accounts. BSR HERproject, Better Factories Cambodia and others have already developed open-source digital wages materials for managers and workers (see Annex).

Encourage merchant payment digitization. The commercial viability of payroll accounts is a challenge to FSPs. The current business model of payroll accounts is fees earned through cash-in/cash-out facilities. The business models at FSPs will need to evolve to encourage financial transactions to remain digital and for workers to make many transactions during the month, including for purchases. The digitization of garment factories’ payroll may provide FSPs with a test case on how to manage this transition with a small, but important, segment of the population.

Foster competition. Factories in Cambodia do not allow workers to choose their payroll account provider—they receive their salary into an account chosen by the factory. In the long run, competition for customers encourages FSPs to design better products and maintain lower prices. Therefore, factories should aim to move beyond direct contracts with FSPs and towards working with a digital payroll service that can deposit a worker’s wages in any bank or Fintech account.

References

- Aker, J. C., R. Boumnijel, A. McClelland, and N. Tierney. 2016. **"Payment Mechanisms and Anti-Poverty Programs: Evidence from a Mobile Money Cash Transfer Experiment in Niger."** *Economic Development and Cultural Change* 65 (1): 1–37.
- Better Than Cash Alliance. 2016. **"Responsible Digital Payments Guidelines."** Guidelines, July 2016, BTCA, New York.
- Better Than Cash Alliance. 2017. **"Digitizing Wages in Bangladesh's Garment Production Sector."** Caselet, March 2017, BTCA, New York.
- Better Than Cash Alliance. 2018. **"Increasing Supply Chain Transparency through Digital Payments."** Business Case Study, June 2018, BTCA, New York.
- Biljon, C., D. von Fintel, and A. Pasha. 2018. **"Bargaining to Work: The Effect of Female Autonomy on Female Labour Supply."** Working Paper 4, Stellenbosch University, Stellenbosch.
- Blumenstock, J., M. Callen, and T. Ghani. 2018. **"Why Do Defaults Affect Behavior? Experimental Evidence from Afghanistan."** *American Economic Review* 2018, 108 (10): 2868–901.
- Breza, E., M. Kanz, and L. Klapper. 2020. **"Learning to Navigate a New Financial Technology: Evidence from Payroll Accounts."** Policy Research Working Paper 9495, World Bank, Washington, DC.
- BSR HERproject and Microsave Consulting. 2019. **"Financial Behavior of Female Garment Workers in India"** Report, October 2019, HERproject, Paris.
- BSR HERproject. 2020. **"Positive Impact for Women and Business Report,"** March 2020, BSR HERproject, Paris
- Field, E., R. Pande, N. Rigol, S. Schaner, and C. T. Moore. 2019. **"Her Own Account: How Strengthening Women's Financial Control Affects Labor Supply and Gender Norms."** Working Paper 26294, National Bureau of Economic Research, Cambridge, MA.
- Muralidharan, K., P. Niehaus, and S. Sukhtankar. 2016. **"Building State Capacity: Evidence from Biometric Smartcards in India."** *American Economic Review* 106 (10): 2895–929.
- Daniela Ortega. 2020. **"Gender Differences in the Wage Digitization Experience: Immersion and Use,"** *Garment Worker Diaries*, June 2020, Microfinance Opportunities, Cambridge.
- Somville, V., and L. Vandewalle. 2018. **"Saving by Default: Evidence from a Field Experiment in Rural India."** *American Economic Journal: Applied Economics* 10 (3): 39–66.

Annex 1

Resources on Digital Wages for Workers and Managers

HERproject Digital Wages training resources, developed with support from Mastercard Center for Inclusive Growth, are open source and readily available online.

- HERfinance Digital Wages Toolkit for Managers – The toolkit sets out best practice and guidance for managers to transition towards digital payroll in a responsible and efficient manner. For offline access, the toolkit can be downloaded from Google Playstore. Available in Khmer, Mandarin and English. <https://dwt.herproject.org/>
- HERfinance Digital Wages Tech Learning Tool for Workers – The tool was developed in collaboration with QuizRR; it uses engaging films, quizzes, and animation to help workers increase their knowledge of financial services, improve their financial health and build their digital literacy. Available in Khmer. <https://herproject.org/resources/curriculum/digital-wages/digital-wages-tech-learning-tool>
- HERfinance Posters – HERfinance Posters is a set of six posters with information about financial services and financial management. Available in Khmer. <https://herproject.org/files/curriculum/HERfinance-Posters-Khmer.pdf>
- HERproject YouTube Channel – The channel includes videos and animation in Khmer, developed with QuizRR; the videos can be used during training, or shown on their own such as in factory canteens. https://www.youtube.com/channel/UC-6XkiuJZdY_cjwMTcY45kQ/videos?view_as=subscriber
- Digital Wages Resource Hub - A centralized site dedicated to hosting and sharing tools, publications, and media resources to help companies and organizations integrate wage digitization in a way that considers the needs of female workers. <https://herproject.org/resources/herfinance>

IFC Digital Finance Tools - Hub to access IFC tools and reports on digital finance.

- Responsible Investing in DFS - Investor guidelines to build a responsible and inclusive digital finance ecosystem. https://www.ifc.org/wps/wcm/connect/industry_ext_content/ifc_external_corporate_site/financial%20institutions/priorities/digital%20finance/Responsible+Investing+in+DFS

Annex 2

Survey Questionnaires

1. Questionnaire for Factory Managers

Questions		Answers	
1	What's your name?		
2	Factory employment		
3	How long have you worked at this factory?		
4	What was your involvement in the HERfinance program?		
5	How many workers are at your factory?		
6	Looking back – how did participation in the HERfinance program help your factory? What was the biggest learning? How many workers are being paid into account now (Percentage estimate)?		
7	How are you supporting new workers to open/use payroll accounts?		
8	Were there challenges to digitization at your factory? If so, what were they? How could HERfinance have helped to alleviate these challenges? What would you have done differently?		
9	Did any issues come up for workers, especially women, during digitization?		
10	How are you supporting new workers to open/use payroll accounts? Are there many workers still being paid in cash? If so, why?		
11	What would you have done differently? [Tricky if contact has changed]		
12	Did any other units in your supplier group digitize too? Were you able to share your learning with them?		
13	Has anyone else approached you to ask about how you digitized. What did you advise them?		
14	What advice would you give to other managers considering digitizing? Has anyone else approached you to ask about how you digitized. What did you advise them?		
15	Will you continue to pay workers into accounts once the government stimulus package has ended? If not, why?		
16	How were wages paid during Covid-19?		
17	How have digital wages helped during Covid-19?	1	Worker stress level
		2	Payment speed & delays
		3	Ability to pay workers
		4	Accessing government RMG Covid support package
18	Are peer educators still supporting their peers to access/use digital accounts, and sharing money management tools such as budgeting, tracking expenses?		
19	Have workers' perceptions of getting paid digitally changed as the program got implemented?		
20	Did the program help improve relations between workers and managers?		
21	How has the level of morale/worker attitude changed since the program has finished? [Assuming program has finished, if not – any visible changes in worker attitudes?]		
22	Do you have any additional feedback or recommendations to help improve the HERfinance program?		

2. Questionnaire for Factory Workers

Section A - Demographics				
Questions		Answers		Instructions
1	Age			
2	Years in garment sector			
3	Highest education level (select one)	1	Not educated, cannot read	
		2	Not educated, can read	
		3	Some primary	
		4	Completed primary	
		5	Some secondary	
		6	Completed secondary	
		7	Further education beyond secondary	
3a	Gender (select one)	1	Female	
		2	Male	
3b	Who owns the housing unit where you live?	1	Landlord	
		2	Family	
		3	Friend	
		4	Other, please specify	
3c	Do you pay rent? (select one)	1	Yes	
		2	No	
3d	Including yourself, how many people live in your housing unit?			
3e	How are they related to you? Indicate the number in each category:	1	Spouse	
		2	Parent	
		3	Sibling	
		4	Child under 18	
		5	Child 18 and over	
		6	Other family	
		7	Not family	

Section B - Account Ownership				
Questions		Answers	Instructions	
4a	Do you have a digital banking account at (select multiple):	1	TrueMoney	if any selected ask Q7 and Q8 after all Q4 (a to d) are answered
		2	LyHour Pay Pro	
		3	Pi Pay	
		4	Pay&Go	
		5	ABA Bank: E-Cash	
		6	Metfone: E-Money	
		7	Smart: SmartLuy	
		8	Wing	
		9	Tesior	
		10	Bongloy	
		11	Acleda Unity	
		12	Asia Wei Luy	
		13	Other, please specify	
4b	Do you have a savings account at (select multiple):	1	Bank	if selected ask Q5 and Q6 after all Q4 (a to d) are answered
		2	MFI	
		3	Tong ting etc.	
		4	Other, please specify	
4c	Do you have an outstanding loan at (select multiple):	1	Bank	if any selected ask Q9 after all Q4 (a to d) are answered
		2	MFI	
		3	Tong ting etc.	
		4	Money lender	
		5	Other, please specify	
4d	Do you have a guarantor on a loan (select multiple)?	1	Parent	
		2	Sibling	
		3	Other family	
		4	Friend	
		5	Other, please specify	

Annex 2 continued

5	In the past month, about how many times did you:		If yes to 4a
5A	withdraw money from an account (select one)?	0	
		1	
		2+	
5B	deposit cash into an account (select one)?	0	
		1	
		2+	
5C	transfer money into an account you own from another account you own (select one)?	0	
		1	
		2+	
5D	send money to family or friends directly from your account (select one)?	0	
		1	
		2+	
5E	use your account to pay for a purchase in a store (select one)?	0	jump to 5G
		1	continue to 5F
		2+	continue to 5F
5F	IF 1 or 2+ ask: Did you deposit cash into the account to do this?	Yes	
		No	
5G	use your account to pay a bill?	0	jump to 5J
		1	continue to 5H and 5I
		2+	continue to 5H and 5I
5H	IF 1 or 2+ ask: Did you deposit cash into the account to do this?	Yes	
		No	
5I	IF 1 or 2+: which bill (select multiple)?	Electricity, water	
		Rent	
		Insurance	
		Repayment loan	
		Payment of things bought	
		Other, please specify	

5J	make any other payment in exchange for goods or services using your account (select one)?	0	jump to 5L
		1	continue to 5K
		2+	continue to 5K
5K	IF 1 or 2+: did you deposit cash into the account to pay someone digitally (select one):	Yes	
		No	
5L	receive a payment into the account from someone else digitally (select one):	0	
		1	
		2+	
6	In the past 3-months, how many times did you:		
6A	Withdraw money from an account	0	if Q5A is 0
		1	
		2+	
6B	Deposit cash into an account	0	if Q5B is 0
		1	
		2+	
6C	Transfer money into an account you own from another account you own	0	if Q5C is 0
		1	
		2+	
6D	send money to family or friends directly from your account	0	if Q5D is 0
		1	
		2+	
6E	use your account to pay for a purchase in a store?	0	if Q5E is 0 jump to 6G
		1	continue to 6F
		2+	continue to 6F
6F	IF 1 or 2+ ask: Did you deposit cash into the account to do this?	Yes	
		No	
6G	use your account to pay a bill?		if Q5G is 0
		0	jump to 6J
		1	continue to 6H and 6I
		2+	continue to 6H and 6I
6H	IF 1 or 2+ ask: Did you deposit cash into the account to do this?	Yes	
		No	

Annex 2 continued

6I	IF 1 or 2+: which bill (select multiple)?		Electricity, water	
			Rent	
			Insurance	
			Repayment loan	
			Payment of things bought	
			Other, please specify	
6J	make any other payment in exchange for goods or services using your account (select one)?		0	if Q5J is 0 jump to 6L
			1	continue to 6K
			2+	continue to 6K
6K	IF 1 or 2+: did you deposit cash into the account to pay someone digitally (select one):		Yes	
			No	
6L	receive a payment into the account from someone else digitally (select one):		0	if Q5L is 0
			1	
			2+	
7	In the past month, about how many times did you			if yes to 4b
7A	withdraw money from your digital banking account(s) (select one)?		0	
			1	
			2+	
7B	deposit cash into your digital banking account(s) (select one)?		0	
			1	
			2+	
7C	transfer money into a digital banking account you own from another digital banking account you own (select one)?		0	
			1	
			2+	
7D	send money to family or friends directly from your digital banking account(s) (select one)?		0	
			1	
			2+	
7E	use your phone to pay for a purchase in a store (select one)?		0	jump to 7G
			1	continue to 7F
			2+	continue to 7F
7F	IF 1 or 2+ ask: Did you deposit cash into the account to do this (select one)?		Yes	
			No	
7G	use your phone to pay a bill (select one)?		0	jump to 7J
			1	continue to 7H and 7I
			2+	continue to 7H and 7I

7H	IF 1 or 2+ ask: Did you deposit cash into the account to do this (select one)?		Yes	
			No	
7I	IF 1 or 2+: which bill (select multiple)?		Electricity, water	
			Rent	
			Insurance	
			Repayment loan	
			Payment of things bought	
			Other, please specify	
7J	make any other payment in exchange for goods or services using your digital banking account(s) (select one)?		0	jump to 7L
			1	continue to 7K
			2+	continue to 7K
7K	IF 1 or 2+: did you deposit cash into the account to pay someone digitally (select one)?		Yes	
			No	
7L	receive a payment into your digital banking account(s) from someone else digitally (select one)?		0	
			1	
			2+	
8	In the past 3-months, how many times did you:			
8A	Withdraw money from your digital banking account(s) (select one)?		0	if Q7A is 0
			1	
			2+	
8B	Deposit cash into your digital banking account(s) (select one)?		0	if Q7B is 0
			1	
			2+	
8C	Transfer money into a digital banking account you own from another digital banking account you own (select one)?		0	if Q7C is 0
			1	
			2+	
8D	send money to family or friends directly from your digital banking account(s) (select one)?		0	if Q7D is 0
			1	
			2+	
8E	use your phone to pay for a purchase in a store (select one)?		0	if Q7E is 0 jump to 8G
			1	continue to 8F
			2+	continue to 8F
8F	IF 1 or 2+ ask: Did you deposit cash into the account to do this (select one)?		Yes	
			No	

Annex 2 continued

8G	use your phone to pay a bill (select one)?	0	if Q7G is 0 jump to 8J
		1	continue to 8H and 8I
		2+	continue to 8H and 8I
8H	IF 1 or 2+ ask: Did you deposit cash into the account to do this (select one)?	Yes	
		No	
8I	IF 1 or 2+: which bill (select multiple)?	Electricity, water	
		Rent	
		Insurance	
		Repayment loan	
		Payment of things bought	
	Other, please specify		
8J	make any other payment in exchange for goods or services using your digital banking account(s) (select one)?	0	if Q7J is 0 jump to 8L
		1	continue to 8K
		2+	continue to 8K
8K	IF 1 or 2+: did you deposit cash into the account to pay someone digitally (select one)?	Yes	
		No	
8L	receive a payment into your digital banking account(s) from someone else digitally (select one)?	0	if Q7L is 0
		1	
		2+	
9	Thinking about any of the loans you have:		If yes to 4c
9A	In the past three months, how have you received your loan money (select one)?	Cash	
		Into an account	
9B	In the past three months, how have you made your loan repayment (select one)?	Cash	
		Into an account	
9C	In the past three months, have you made a loan repayment on behalf of another person (select one)?	Yes	continue to Q9D
		No	Skip Q9D, jump to Q9E
9D	IF YES, did you make this payment in cash or into an account (select one)?	Cash	
		Into an account	
9E	In the past 3 months, have you paid late any loan payments (select one)?	Yes	
		No	
9F	In the past 3 months, have you borrowed any money to make a loan payment (select one)?	Yes	
		No	

Section C - Current Method for Receiving Wages			
Questions		Answers	Instructions
10	How many times a month do you receive a salary payment (select one)?	twice a month	
		weekly	
11	How does the factory pay you your salary (select one)?	Cash	Jump to Section D
		Digital	continue to 12
		Both	continue to 12
12	When did you start receiving payments into an account?		Add calendar for month and year only (not date)
13	How does the factory make other payments, such as allowances, bonuses, overtime etc., to you (select one)?	Cash	
		Digital	
		Both	
14	Do you typically withdraw your full salary in cash, or keep some money in your account (select one)?	Keep full salary in cash	
		Keep some money in account	
15	Do you receive your salary in a bank/FI account or a digital banking account (select multiple)?	List all bank/FI account options	
		TrueMoney	
		LyHour Pay Pro	
		Pi Pay	
		Pay&Go	
		ABA Bank: E-Cash	
		Metfone: E-Money	
		Smart: SmartLuy	
		Wing	
		Tesior	
		Bongloy	
		Aceda Unity	
		Asia Wei Luy	
Other, please specify			
16	How do you typically withdraw your salary (select one)?	ATM	
		Branch/Teller	
		Agent	
17	Have you ever had trouble withdrawing money on payday (select one)?	Yes	go to Q17A
		No	skip Q17A
17A	IF YES: why?		open-ended

Annex 2 continued

18	Do you also have a loan with this bank/MFI?	Yes	Go to Q18A
		No	Skip Q18A
18A	IF YES: did you take out this loan after you started receiving wages into the account?	Yes	
		No	
19	Is your payroll account the 'main' account that you use for financial services?	Yes	Skip Q19A
		No	Go to Q19A
19A	IF NO: what is your main account? List all bank/FI account options	TrueMoney	
		LyHour Pay Pro	
		Pi Pay	
		Pay&Go	
		ABA Bank: E-Cash	
		Metfone: E-Money	
		Smart: SmartLuy	
		Wing	
		Tesior	
		Bongloy	
		Aceda Unity	
		Asia Wei Luy	
	Other, please specify		
20	Is there a convenient agent for you to withdraw your salary?	Yes	
		No	
Section D - Transactions			
Questions		Answers	Instructions
21	Thinking about the past THREE months, were the following financial payments typically done by you by handing over cash, or digitally, through an account at a bank or mobile money wallet:	dropdown	
21A	Pay rent	Cash	select one
21B	Pay electric, water, (or trash) bill	Digital	select one
21C	Pay school fees	Both	select one
21D	Received IHT	Did not do transaction	select one
21E	Sent IHT		select one
21F	Received gift		select one
21G	Sent gift		select one
22	Do you personally own a mobile phone?	Yes	Go to Q22B
		No	Go to Q22A
22A	IF NO: Do you have access top someone else's mobile phone?	Yes	
		No	
22B	IF YES: Can you access the internet through your phone? (/have a smart phone)	Yes	
		No	

Section E - Account Use if Paid Digitally				
Questions		Answers		Instructions
	I am now going to ask you a series of questions about how you might use your money if you were paid by your factory digitally, not in cash.		dropdown	If "cash" in Q11, continue to Q23 to Q27. If "digital" or "both" in Q11, jump to Q28 and Q29.
23	If your factory started paying you digitally, how would you feel if the factory made it compulsory for you to receive your payment in an account at a specific financial institution (bank or MFI) or mobile money provider that they chose, even if you still controlled the account (select one)?	1	Very happy	
		2	Comfortable	
		3	Neither comfortable nor uncomfortable	
		4	Uncomfortable	
		5	Very unhappy	
24	If your factory paid you digitally, what sort of training would you like to have to make you feel more comfortable with being paid this way? I am going to read you a list of topics often covered in such training, please let me know how important you think each topic is from Very Important, Important, Somewhat Important, Not Important, Irrelevant.			
24A	How to keep your money in the account safe (select one)?	1	Very important	
		2	Important	
		3	Somewhat Important	
		4	Not Important	
		5	Irrelevant	
24B	What to do if you lose your phone or card or cannot access your money for some reason (select one)?	1	Very important	
		2	Important	
		3	Somewhat Important	
		4	Not Important	
		5	Irrelevant	
24C	How to withdraw cash (select one)?	1	Very important	
		2	Important	
		3	Somewhat Important	
		4	Not Important	
		5	Irrelevant	
24D	How to check your balance (select one)?	1	Very important	
		2	Important	
		3	Somewhat Important	
		4	Not Important	
		5	Irrelevant	
24E	How to transfer money to someone else (select one)?	1	Very important	
		2	Important	
		3	Somewhat Important	
		4	Not Important	

Annex 2 continued

24F	How to make a bill payment (select one)?	1	Very important	
		2	Important	
		3	Somewhat Important	
		4	Not Important	
		5	Irrelevant	
24G	How to save money in the account (select one)?	1	Very important	
		2	Important	
		3	Somewhat Important	
		4	Not Important	
		5	Irrelevant	
24H	How to keep your account information private (select one)?	1	Very important	
		2	Important	
		3	Somewhat Important	
		4	Not Important	
		5	Irrelevant	
24I	How to maintain control of your account (select one)?	1	Very important	
		2	Important	
		3	Somewhat Important	
		4	Not Important	
		5	Irrelevant	
25	If your factory paid you digitally, how much, in total, would you be willing to pay in account fees per month to maintain the account		Numbers	
26	In your own words, tell me what potential benefits you gain if you were to receive your salary digitally? [This and the next question are the only open-ended questions. Try to probe by asking "Why?" or "Why is that?" at least 3 times during this question]		open-ended	
27	In your own words, tell me what potential problems you might face if you were to receive your salary digitally? [Open ended. Try to probe by asking "Why?" or "Why is that?" at least 3 times during this question]		open-ended	
28	In your own words, tell me what benefits you've gained from receiving your salary digitally? [This and the next question are the only open-ended questions. Try to probe by asking "Why?" or "Why is that?" at least 3 times during this question]		open-ended	
29	In your own words, tell me what problems you've faced receiving your salary digitally? [Open ended. Try to probe by asking "Why?" or "Why is that?" at least 3 times during this question]		open-ended	

Section F - Information about Employment Situation				
Questions		Answers		Instructions
30	Current location of home		text	
31	Factory location		text	
32	Name of factory		text	
33	Time spent traveling every day to factory			
	walking			
	by motorbike			
	by transport			
34	How long worked in factory			
35	Position in factory			
36	How much do you typically earn in a month?			

3. Questionnaire for Workers' Unions

Questions		Probe	Answers
1	Name of the organization		
2	Web address of the organization		
3	What is your position within the organization?		
4	Enter the respondent's name		
5	Enter the respondent's phone number		
6	What share of the members of your union pay digitally vs. cash?		
7	Have you personally worked in a factory or represented workers in a factory when they were going through the process of shifting from being paid in cash to being paid digitally?	<p>What was that like?</p> <p>Was the union consulted by factory management before the process began?</p> <p>Was it consulted during the process?</p> <p>What concerns did workers raise?</p>	
If Yes to Q7:			
8	Was your union involved in the digitization process involving its members?	<p>Were you consulted beforehand or during the process?</p> <p>Are there any specific issues you would have liked to have been consulted on?</p> <p>What sort of mechanisms are put in place to make sure that workers gain from the digitization of their wages?</p> <p>Are there any particular issues that you are most concerned about? Did the shift from monthly to bi-monthly payments affect the factory or unions support for wage digitization? (Why?)</p>	
9	Payments' providers often provide education in the use of digital accounts to workers. Do you think that is a good idea?	<p>Did workers at your factory receive any education?</p> <p>IF yes, who provided and paid for this education and what material was included? IF No, who do you think should provide this education? Who should pay for it?</p> <p>What types of material should workers receive?</p>	
10	Who paid the bank fees in this factory?	<p>How was this decided?</p> <p>Did you think what was decided was correct? (Please explain).</p> <p>What, if anything, would you recommend be done differently in deciding who pays the fees?</p>	
11	In your opinion, what are the main disadvantages for workers from being paid digitally?	Why do you say this?	
12	In your opinion, what are the main benefits to workers from being paid digitally?	Why do you say this?	
13	In your opinion, are the benefits/disadvantages of getting paid digitally the same for women and men?	Why do you say this?	
14	In your opinion, what are the main disadvantages for unions from workers being paid digitally?	Why do you say this?	
15	In your opinion, what are the main benefits to unions from workers being paid digitally?	Why do you say this?	
16	What advice would you give organizations that are interested in promoting to change to using digital financial services to pay workers in the RMG sector?		
17	Generally, do you think the full digitization of wage payments in the RMG sector in Cambodia will end up being a good thing?		

If NO to Q7:			
8	How would you like your union to be involved in any wage digitization process involving its members?	Would you want to be consulted beforehand or during the process? What sort of mechanisms do you think should be put in place to make sure that workers gain from the digitization of their wages? Are there any issues that you are most concerned about?	
9	Payments' providers often provide education in the use of digital accounts to workers. Do you think that is a good idea?	Who do you think should provide this education? Who should pay for it? What types of material should workers receive?	
10	Who paid the bank fees in this factory?	How was this decided? Did you think what was decided was correct? (Please explain). What, if anything, would you recommend be done differently in deciding who pays the fees?	
11	In your opinion, what are the main disadvantages for workers from being paid digitally?	Why do you say this? what are the risks of paying workers digitally? Do you think there could be any unintended consequences? (Probe on specific risks for women)	
12	In your opinion, what are the main benefits to workers from being paid digitally?	Why do you say this?	
13	In your opinion, are the benefits/disadvantages of getting paid digitally the same for women and men?	Why do you say this?	
14	In your opinion, what are the main disadvantages for unions from workers being paid digitally?	Why do you say this?	
15	In your opinion, what are the main benefits to unions from workers being paid digitally?	Why do you say this?	
16	What advice would you give organizations that are interested in promoting to change to using digital financial services to pay workers in the RMG sector?		
17	Generally, do you think the full digitization of wage payments in the RMG sector in Cambodia will end up being a good thing?		
To everyone:			
18	In your opinion, are the benefits/disadvantages of getting paid digitally the same across Cambodia or do workers from some cities benefit more than others?		
19	In your opinion, are the benefits/disadvantages of getting paid digitally the same for workers who are members of a union compared to workers who are not members of a union?		
20	What support should FSP and factory management provide to women workers for wage digitization?		
21	Who are the most vulnerable workers and what additional support would they need to access and use payroll accounts? (e.g., older married women, female migrant workers, etc.).		

4. Questionnaire for Payment Providers

Questions		Probe	Answer
1	Name of the organization		
2	Web address of the organization		
3	What is your position within the organization?		
4	Enter the respondent's name		
5	Enter the respondent's phone number		
6	Is selling a digital wage payments solution to RMG sector factories in Cambodia a strategic priority for [XXXX]?	Why?/Why not?	
7	Does [XXXX] have a marketing strategy focused on providing a digital wage payment solution to factories in the RMG sector?		
8	Is there a dedicated team devoted to implementing the strategy?		
9	If yes, do you have a target number of factories that you are trying to onboard as customers?	Over what time period?	
10	In your opinion, what are the main barriers to acquiring factories as customers of your digital wage payments solution?	Has it become easier over time to acquire factories as customers? What feedback have you had around payroll account fees?	
11	In your opinion, what are the main benefits for [XXXX] to getting more customers from the RMG sector?		
12	Does [XXXX] offer and/or impart regular training sessions inside the factory premises?	How often and for how long? What is the cost?	
13	Does [XXXX] have products or services that cater specifically to the RMG sector?	Why/Why not?	
14	if no, does [XXXX] have plans to develop products or services that cater specifically to the RMG sector?	Why, Which ones?/Why not?	
15	if yes, does [XXXX] have plans to continue developing products or service that cater specifically to the RMG sector?	Why, Which ones?/Why not?	

16	What would you say is the business case for factory managers to choose those products?		
17	What are the main problems you have encountered, if any, in retaining factories as customers?	What is the business case for factory managers to choose those products?	
18	What characteristics of the services you deliver to factories do you think are most important to them?		
19	Do you install an ATM on factory premises?		
20	Do you send any agents to the factory to offer cash-out services on payday?		
21	How do you prepare for liquidity on payday?		
22	Is providing digital payments and financial services (more than only wage payments) to workers in the RMG sector, a priority for [XXXX]?	Why/Why not?	
23	Does [XXXX] have a marketing strategy, focused on providing digital payments and financial services, to workers in the RMG sector?		
24	Is there a dedicated team devoted to implementing the strategy?		
25	If yes, does the team have a specific acquisition target?	Over what time period?	
26	In your opinion, what are the main barriers to providing digital financial and payment services to workers in the RMG sector?	Do you think these barriers are different for providing services to men and women?	
27	In your opinion, what are the main benefits for [XXXX] to provide digital financial and payment services to workers in the RMG sector?	Do you think these benefits are different for men and women?	
28	What kind of support does [XXXX] offer to RMG workers?	Do you have any support mechanisms or activities that are targeted at women?	
29	Does [XXXX] have products or services that cater specifically to RMG workers?	Why/Why not? Are there any payroll-like credit products (for example credit that is auto-deducted from future payroll)	

Annex 2 continued

30	if no, does [XXXX] have plans to develop products or services that cater specifically to the RMG workers?	Why, Which ones?/Why not? Are you considering products or services that specifically target women?	
31	if yes, does [XXXX] have plans to continue developing products or services that cater specifically to the RMG workers?	Why, Which ones?/Why not?	
32	Do you offer workers free withdrawals? How many per paid period?		
33	In your experience, how do workers use their digital pay accounts?	How many withdrawals does a typical worker make in a month? Do workers typically keep a balance until the payday? Use their account for long-term savings? Make any additional deposits?	
34	What advice would you give organizations that are interested in promoting the uptake and use of digital financial services among workers in the RMG sector?		
35	Generally, what do you see as the major barriers to the full digitization of wage payments in the RMG sector in Cambodia?		
36	Are there other similar sectors (to the garment) that currently rely on DFS solutions for wage payments, if so how much of it is translatable to RMG manufacturing?		

4. Questionnaire for Workers' Ecosystem

a. Questions to Landlords

Questions		Answers		Instructions
1	How many housing units do you currently rent out?			Verbatim
2	What is the name of the area where the majority of the housing units you rent out are located?			Verbatim
3	How many rent payments do you receive each month?			Verbatim
4	Of those rent payments what share of them are paid:			
	weekly		% share	
	every two weeks		% share	
	monthly		% share	
	other, specify		% share	
5	Roughly what share of those rent payments come from garment workers?		None (0%)	
			Greater than 0% but less than 50%	
			50%	
			Greater than 50% but less than 100%	
			All (100%)	
6	Thinking of the busiest week in any particular month, what share of your rent payments for the month do you receive in that week?		50% or less	
			Greater than 50% but less than 80%	
			80% or more	
7	Briefly describe to me how you collect the rents you are owed			
8	How many people are involved in collecting rents and recording rents (so you know who has paid and who has not)?			
9	How many days per month do they work on this task?			
10	How much do you estimate it costs you to collect and record your rents?			
11	Other than rental income, what other ways do you earn income? Specify:			
	Source 1			Verbatim
	Source 2			Verbatim
	Source 3			Verbatim
	Source 4			Verbatim

Annex 2 continued

12	Do you have a digital banking account at (select multiple):	1	TrueMoney	
		2	LyHour Pay Pro	
		3	Pi Pay	
		4	Pay&Go	
		5	ABA Bank: E-Cash	
		6	Metfone: E-Money	
		7	Smart: SmartLuy	
		8	Wing	
		9	Tesior	
		10	Bongloy	
		11	Aceda Unity	
		12	Asia Wei Luy	
		13	Other, please specify	
13	In the past month, how many transactions have you performed using any of your digital bank accounts (this includes paying money out and receiving money from others)?		None	
			1 to 5	
			5 to 10	
			10 to 20	
			More than 20	
14	Of those transactions what share do you think were business-related (for example to buy supplies or to receive a rent payment) as opposed to personal		None	
			50% or less	
			Greater than 50% but less than 80%	
			80% or more	Skip to 18
15	Has a renter ever paid you rent directly into your digital bank account?		Yes	
			No	
15a	If yes, how often did this happen last month?			Verbatim
15b	If yes, how common is it for you to accept rent payments directly into your digital bank account?		Not common	Skip to 18
12	Do you have a digital banking account at (select multiple): select multiple	1	TrueMoney	
		2	LyHour Pay Pro	
		3	Pi Pay	
		4	Pay&Go	
		5	ABA Bank: E-Cash	
		6	Metfone: E-Money	
		7	Smart: SmartLuy	
		8	Wing	
		9	Tesior	
		10	Bongloy	
		11	Aceda Unity	
		12	Asia Wei Luy	
		13	Other, please specify	

13	In the past month, how many transactions have you performed using any of your digital bank accounts (this includes paying money out and receiving money from others)?		None	
			1 to 5	
			5 to 10	
			10 to 20	
			More than 20	
14	Of those transactions what share do you think were business-related (for example to buy supplies or to receive a rent payment) as opposed to personal		None	
			50% or less	
			Greater than 50% but less than 80%	
			80% or more	Skip to 18
15	Has a renter ever paid you rent directly into your digital bank account?		Yes	
			No	
15a	If yes, how often did this happen last month?			Verbatim
15b	If yes, how common is it for you to accept rent payments directly into your digital bank account?		Not common	Skip to 18
			Fairly common	Ask 14
			Very common	Ask 14
14	When did you start accepting rent payments directly into your digital bank account?		Month/Year	Ask 15 to 17
15	In your own words, why did you start accepting rent payments directly into your digital bank account?			Verbatim
16	In your own words, what have been the main problems associated with accepting rent payments directly into your digital bank account?			Verbatim
17	In your own words, what have been the main benefits associated with accepting rent payments directly into your digital bank account?			Verbatim
Impact of wage digitization				
	In the near future, factories in the area where your housing units are located may start paying workers directly into their digital bank accounts.			
18	Do you think that change might lead workers to ask to pay their rent digitally? Please explain your answer			Verbatim Ask 19
19	If a large number of your renters were to ask you to accept digital rent payments, how would you respond? Why would you respond that way?			Verbatim

4. Questionnaire for Workers' Ecosystem *continued*

b. Questions to Retail Merchants

Questions		Answers	Instructions
Sales Activity			
1	How many stores do you own?		Verbatim
2	What is the name of the area(s) where your store(s) is/are located?		Verbatim
	Area 1		Verbatim
	Area 2		Verbatim
	Area 3		Verbatim
	Area 4		Verbatim
	Area 5		Verbatim
3	How many customers do you serve per day?		
	Normal day		Verbatim
	Slow day		Verbatim
	Busy day		Verbatim
4	Roughly what share of customers are garment workers?	None (0%)	
		Greater than 0% but less than 50%	
		50%	
		Greater than 50% but less than 100%	
		All (100%)	
5	Other than your retail activities, what other ways do you earn income? Specify:		
	Source 1		Verbatim
	Source 2		Verbatim
	Source 3		Verbatim
	Source 4		Verbatim

Personal Digital Finance Service Use				
6	Do you have a digital banking account at (select multiple):	1	TrueMoney	
		2	LyHour Pay Pro	
		3	Pi Pay	
		4	Pay&Go	
		5	ABA Bank: E-Cash	
		6	Metfone: E-Money	
		7	Smart: SmartLuy	
		8	Wing	
		9	Tesior	
		10	Bongloy	
		11	Acleda Unity	
		12	Asia Wei Luy	
		13	Other, please specify	
7	In the past month, how many transactions have you performed using any of your digital bank accounts (this includes paying money out and receiving money from others)?		None	
			1 to 10	
			11 to 20	
			21 to 50	
8	Of those transactions what share do you think were business-related (for example to buy supplies or to receive a rent payment) as opposed to personal		None	
			50% or less	
			Greater than 50% but less than 80%	
			80% or more	
Payments Methods				
9	What share of your sales are paid for:			
	In cash at the time of purchase		% share	skip to 15 only if digital = 0 and "on credit" =0
	Through a digital transfer at the time of purchase		% share	Ask 11 to 14, if more than 0% may also need to ask 10 if "on credit" is >0
	On credit		% share	Ask 10 if >0
10	If on credit, what share of your customers typically pay for goods purchased on credit			
	In cash		% share	Skip to 15 IF digital = 0
	Through a digital transfer		% share	Ask 11 to 14 if >0
11	When did you start accepting digital payments?		Month/Year	

Annex 2 continued

12	In your own words, why did you start accepting payments digitally?			Verbatim
13	In your own words, what have been the main problems associated with accepting payments digitally?			Verbatim
14	In your own words, what have been the main benefits associated with accepting payments digitally?			Verbatim
15	What share of your purchases from your suppliers are paid for:			
	In cash at the time of purchase		% share	skip to 21 only if digital = 0 and "on credit" =0
	Through a digital transfer at the time of purchase		% share	Ask 17 to 20 if more than 0% may also need to ask 10 if "on credit" is >0
	On credit		% share	Ask 16
16	If on credit, what share of what you owe your suppliers do you typically pay:			
	In cash?		% share	Skip to 21 if digital =0
	Through a digital transfer?		% share	Ask 17 to 20 if >0
17	When did your supplier start accepting digital payments?		Month/Year	
18	In your own words, why do you think your supplier started accepting payments digitally?			Verbatim
19	In your own words, what have been the main problems associated with making supplier payments digitally?			Verbatim
20	In your own words, what have been the main benefits associated with making supplier payments digitally?			Verbatim
Impact of wage digitization				
	In the near future, factories in the area where your retail store(s) is/are located may start paying workers directly into their digital bank accounts.			
21	Do you think that change might lead workers to ask to pay for goods digitally? Please explain your answer			Verbatim
22	If a large number of your customers were to ask you to accept digital payments, how would you respond? Why would you respond that way?			Verbatim

4. Questionnaire for Workers' Ecosystem *continued*

c. Questions to cooked food vendors

Questions		Answers	Instructions
Sales Activity			
1	How many stalls do you own?		Verbatim
2	What is the name of the area(s) where your stall(s) is/are located?		Verbatim
	Area 1		Verbatim
	Area 2		Verbatim
	Area 3		Verbatim
	Area 4		Verbatim
	Area 5		Verbatim
2a	What meals do you serve at your stall?	Breakfast	
		Lunch	
		Afternoon/Evening meal	
3	How many customers do you serve per day?		
	Normal day		Verbatim
	Slow day		Verbatim
	Busy day		Verbatim
4	Roughly what share of customers are garment workers?	None (0%)	
		Greater than 0% but less than 50%	
		50%	
		Greater than 50% but less than 100%	
		All (100%)	
5	Other than your retail activities, what other ways do you earn income? Specify:		
	Source 1		Verbatim
	Source 2		Verbatim
	Source 3		Verbatim
	Source 4		Verbatim

Annex 2 continued

Personal Digital Finance Service Use				
6	Do you have a digital banking account at (select multiple)	1	TrueMoney	
		2	LyHour Pay Pro	
		3	Pi Pay	
		4	Pay&Go	
		5	ABA Bank: E-Cash	
		6	Metfone: E-Money	
		7	Smart: SmartLuy	
		8	Wing	
		9	Tesior	
		10	Bongloy	
		11	Acleda Unity	
		12	Asia Wei Luy	
		13	Other, please specify	
7	In the past month, how many transactions have you performed using any of your digital bank accounts (this includes paying money out and receiving money from others)?		None	
			1 to 10	
			11 to 20	
			21 to 50	
			More than 50	
8	Of those transactions what share do you think were business-related (for example to buy supplies or to receive a rent payment) as opposed to personal		None	
			50% or less	
			Greater than 50% but less than 80%	
			80% or more	
Payments Methods				
9	What share of your sales are paid for:			
	In cash at the time of purchase		% share	skip to 15 only if digital = 0 and "on credit" =0
	Through a digital transfer at the time of purchase		% share	Ask 11 to 14, if more than 0% may also need to ask 10 if "on credit" is >0
	On credit		% share	Ask 10 if >0
10	If on credit, what share of your customers typically pay for goods purchased on credit			
	In cash		% share	Skip to 15 IF digital = 0
	Through a digital transfer		% share	Ask 11 to 14 if >0
11	When did you start accepting digital payments?		Month/Year	

12	In your own words, why did you start accepting payments digitally?			Verbatim
13	In your own words, what have been the main problems associated with accepting payments digitally?			Verbatim
14	In your own words, what have been the main benefits associated with accepting payments digitally?			Verbatim
15	What share of your purchases from your suppliers are paid for:			
	In cash at the time of purchase		% share	skip to 21 only if digital = 0 and "on credit" =0
	Through a digital transfer at the time of purchase		% share	Ask 17 to 20 if more than 0% may also need to ask 10 if "on credit" is >0
	On credit		% share	Ask 16
16	If on credit, what share of what you owe your suppliers do you typically pay:			
	In cash?		% share	Skip to 21 if digital =0
	Through a digital transfer?		% share	Ask 17 to 20 if >0
17	When did your supplier start accepting digital payments?		Month/Year	
18	In your own words, why do you think your supplier started accepting payments digitally?			Verbatim
19	In your own words, what have been the main problems associated with making supplier payments digitally?			Verbatim
20	In your own words, what have been the main benefits associated with making supplier payments digitally?			Verbatim
Impact of wage digitization				
	In the near future, factories in the area where your retail store(s) is/are located may start paying workers directly into their digital bank accounts.			
21	Do you think that change might lead workers to ask to pay for goods digitally? Please explain your answer			Verbatim
22	If a large number of your customers were to ask you to accept digital payments, how would you respond? Why would you respond that way?			Verbatim

4. Questionnaire for Workers' Ecosystem *continued*

d. Questions to large goods vendors

Questions		Answers	Instructions
Sales Activity			
1	How many stores do you own?		Verbatim
2	What is the name of the area(s) where your stall(s) is/are located?		Verbatim
	Area 1		Verbatim
	Area 2		Verbatim
	Area 3		Verbatim
	Area 4		Verbatim
	Area 5		Verbatim
3	How many customers do you serve per day?		
	Normal day		Verbatim
	Slow day		Verbatim
	Busy day		Verbatim
4	Roughly what share of customers are garment workers?	None (0%)	
		Greater than 0% but less than 50%	
		50%	
		Greater than 50% but less than 100%	
		All (100%)	
5	Other than your retail activities, what other ways do you earn income? Specify:		
	Source 1		Verbatim
	Source 2		Verbatim
	Source 3		Verbatim
	Source 4		Verbatim

Personal Digital Finance Service Use				
6	Do you have a digital banking account at (select multiple):	1	TrueMoney	
		2	LyHour Pay Pro	
		3	Pi Pay	
		4	Pay&Go	
		5	ABA Bank: E-Cash	
		6	Metfone: E-Money	
		7	Smart: SmartLuy	
		8	Wing	
		9	Tesior	
		10	Bongloy	
		11	Aceda Unity	
		12	Asia Wei Luy	
		13	Other, please specify	
7	In the past month, how many transactions have you performed using any of your digital bank accounts (this includes paying money out and receiving money from others)?		None	
			1 to 10	
			11 to 20	
			21 to 50	
			More than 50	
8	Of those transactions what share do you think were business-related (for example to buy supplies or to receive a rent payment) as opposed to personal		None	
			50% or less	
			Greater than 50% but less than 80%	
			80% or more	
Payments Methods				
9	What share of your sales are paid for:			
	In cash at the time of purchase		% share	skip to 15 only if digital = 0 and "on credit" = 0
	Through a digital transfer at the time of purchase		% share	Ask 11 to 14, if more than 0% may also need to ask 10 if "on credit" is >0
	On credit		% share	Ask 10 if >0
10	If on credit, what share of your customers typically pay for goods purchased on credit			
	In cash		% share	Skip to 15 IF digital = 0
	Through a digital transfer		% share	Ask 11 to 14 if >0
11	When did you start accepting digital payments?		Month/Year	
12	In your own words, why did you start accepting payments digitally?			Verbatim
13	In your own words, what have been the main problems associated with accepting payments digitally?			Verbatim

Annex 2

14	In your own words, what have been the main benefits associated with accepting payments digitally?			Verbatim
15	What share of your purchases from your suppliers are paid for:			
	In cash at the time of purchase		% share	skip to 21 only if digital = 0 and "on credit" =0
	Through a digital transfer at the time of purchase		% share	Ask 17 to 20 if more than 0% may also need to ask 10 if "on credit" is >0
	On credit		% share	Ask 16
16	If on credit, what share of what you owe your suppliers do you typically pay:			
	In cash?		% share	Skip to 21 if digital =0
	Through a digital transfer?		% share	Ask 17 to 20 if >0
17	When did your supplier start accepting digital payments?		Month/Year	
18	In your own words, why do you think your supplier started accepting payments digitally?			Verbatim
19	In your own words, what have been the main problems associated with making supplier payments digitally?			Verbatim
20	In your own words, what have been the main benefits associated with making supplier payments digitally?			Verbatim
Impact of wage digitization				
	In the near future, factories in the area where your retail store(s) is/are located may start paying workers directly into their digital bank accounts.			
21	Do you think that change might lead workers to ask to pay for goods digitally? Please explain your answer			Verbatim
22	If a large number of your customers were to ask you to accept digital payments, how would you respond? Why would you respond that way?			Verbatim

Contacts:

IFC: digitalwages-cambodia@ifc.org

BSR's HER Project: getinvolved@herproject.org