

# BANGLADESH | 2019







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## EXECUTIVE SUMMARY

**Wage digitization in the apparel industry is just in its infancy but is quickly gaining traction as more and more owners see the benefits with the model. However, in order for the adoption to increase, there are certain challenges to the transition that must be tackled by the stakeholders of the industry to create a conducive environment for digitization.**

### Bangladesh aims to be the next Asian Tiger

Among

**3.5 million workers,**

**53.2% are women.**



Among other strong macroeconomic indicators, increased digitization, higher disposable income and consistent GDP growth at around 7.2 percent<sup>1</sup> have influenced the country's development over the last decade. The population of Bangladesh has also shown its ability to leapfrog technology adoption and in just half a decade, 35 million unique mobile internet users and roughly 45 million smartphone users<sup>2</sup> have formed in the country and these numbers are growing at an accelerated rate.

Due to increased mobile penetration, 18 banks and institutions are currently offering Mobile Financial Services (MFS) and on an average, 6.5 million transactions are being executed each day by 67.01 million registered users<sup>3</sup>. So far, digitization has been key in increasing the net of financial inclusion in Bangladesh.

Through investment in key sectors such as ICT, apparel, pharmaceutical and leather, the country aims to be the next Asian Tiger within the next decade. The government's goal to form a 'Digital Bangladesh' by the year 2021 have paved the path for the development of the ICT industry but **the country's main growth engine has predominantly been the apparel sector with its contribution of 83.5 percent to the export portfolio.**

### Apparel is at the heart of its development

Raking in \$30.6 billion in exports as of last year<sup>4</sup>, the apparel sector has also been instrumental in creating job opportunities and improving the lives of those surviving on incomes of less than \$150 a month per household<sup>5</sup>. The sector has also been instrumental in women's economic empowerment as according the Centre for Policy Dialogue's (CPD) 2018 RMG study, of the 3.5 million workers, roughly 53.2 percent are women. From increased automation, evolving compliance requirements to the global surge in demand for fast fashion products, the apparel sector has consistently

adopted crucial transformations in its development, **cementing Bangladesh as the second largest apparel producer in the world.**<sup>6</sup> Digitization is the new frontier the sector is integrating into its paces and suppliers are just starting to realize the benefits of digitization and its potential to accelerate growth.

### **Digitization is gradually becoming a priority among apparel suppliers**

For suppliers, the first contact of digitization comes when they integrate digital solutions in their operations to increase efficiency. Up until now, digitization has not been a priority for most but leading players are starting to see the global shift in best practices and are proactively adopting digital initiatives to remain competitive. A key step for digitization among suppliers has emerged in the form of wage digitization of their workers.

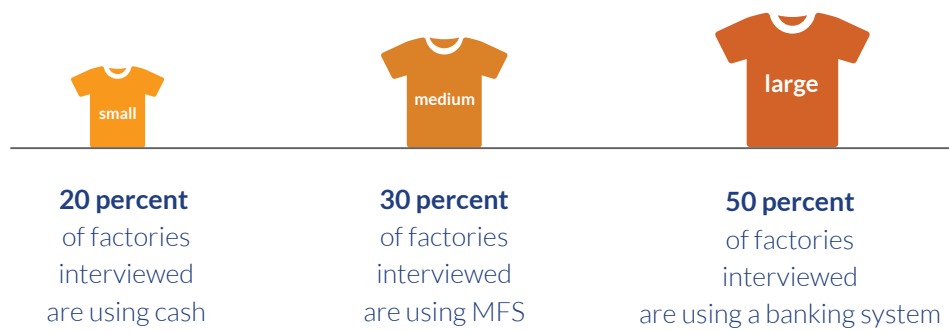
Wage disbursement in the apparel sector predominantly has been in the form of cash. Some large manufacturers have transitioned to a digital disbursement system, while a lot more are in the pipeline. Wage digitization impacts financial inclusion greatly as due to high mobile penetration, Digital Financial Services (DFS) has become the best tool to introduce the unbanked population of Bangladesh to financial and banking services. DFS generally encompasses all mediums of digital transaction other than cash and in Bangladesh, two major forms of DFS has primarily emerged as MFS and Banking. Being one of the key employment sectors, the apparel industry, through wage digitization, will be instrumental in driving financial inclusion forward.

Wage digitization in the apparel industry of Bangladesh has initially been spearheaded by larger manufacturers such as Noman Group, DBL Group and Mohammadi Group among others. According to major DFS providers, **roughly a million apparel workers are now receiving cashless salary. The challenge remains in accelerating the adoption of the current 200 to 250 factories to 2500+ factories.**

In order to gauge the current state of digitization, this study has engaged with around 40 management professionals and owners from the apparel sector. Of the factories engaged, 50 percent were using a banking system for disbursing wages, 30 percent were using MFS and 20 percent were using solely cash. Of the total, 70 percent were paying wages in a hybrid model of either banking plus cash or cash plus MFS.

Approximately  
**1 million**  
apparel workers  
are now receiving  
salary digitally

## Sampling breakdown



Based on the number of workers and typical wage disbursement amount, the factories have been divided into small, medium and large categories.

A detailed characteristic breakdown of the sample is shared in a subsequent part of the report.

1. Bangladesh GDP Growth By Year, World Bank, 2017, Accessed On: 17/01/2019
2. Bangladesh: Driving mobile-enabled digital transformation, GSMA, 2017
3. MFS Comparative Summary Statement Bangladesh Bank, August-2018, Accessed On: 17/01/2019
4. Export Statistics Book 2015-2016, EPB, July-2018, Accessed On: 17/01/2019
5. Bangladesh The Surging Consumer Market Nobody Saw Coming, BCG, 2015
6. World trade Statistical Review 2018, WTO, 2018



## Having an existing digital infrastructure in place facilitated wage digitization greatly for first adopters

Of the factories interviewed, 64 percent were using a back-end software for record-keeping purposes and 100 percent were using a combination of Excel and log book. 88 percent of factories showed strong interest in fully digitizing their wage disbursement system as they have either experienced the benefits of digitization in general on other aspects of their business, e.g. supply chain management, employee attendance tracking and record-keeping among others, or they have digitized their wage disbursement to a certain extent and are eager to expedite the process.

## Factory owners see the challenges of paying wages solely by cash

On a scale of 1 to 10 for 'Willingness To Scale', 10 being the highest optimism level, small sized factories gave a score of 4.6, medium sized factories gave a score of 6.6 and large factories gave a score of 8.2. This shows favorable circumstances for digitization as most manufacturers understand the benefits of wage digitization and are willing to invest in it.

Before digitization, the major bottleneck with using cash was primarily security, according to 80 percent of respondents. **Transporting close to BDT 150 to 200 million (~USD 1.8 to 3.6 million) in cash every month to remote factory locations was a huge security challenge for manufacturers.** The second most challenging factor was malpractices carried out by line level factory managers according to 56 percent of respondents. Cash allowed line managers to either create fake workers on log sheets or take a kick back from workers for ensuring their job security. After a transition to a digital system, these proliferations reduced to almost zero instances for most factories as now there was higher accountability.

## Factory owners see the benefits of wage digitization created by accountability and transparency

- 1 According to 80 percent of respondents, the major benefit all DFS adopters experienced was the time saved during the wage disbursement week. Although the banking process time remained similar to the cash based system, the salary week disbursement process was much faster.
- 2 The second major benefit stated by all DFS adopters was the ability to monitor and manage the disbursement process, **which helped reduce malpractices and give management greater visibility over their business.**

# 88%

of factories showed strong interest in fully digitizing their wage disbursement system

- 3 Of the respondents that chose banking as their wage disbursement method, 80 percent stated that they chose banking because they've either been working with the bank already or because **it was cheaper than other alternatives.**
- 4 Alternatively, among those that chose MFS, 90 percent stated that they choose MFS because the vendor was either handling wage disbursement for other manufacturers or **because the implementation was faster compared to other systems.**
- 5 Factory owners were now also equipped with concrete data about their business, which helped them make calculated business decisions to increase productivity.
- 6 Although not clear at first, the benefits of digitization were slowly materializing to worker groups **as they became more habituated with the system.** It saved them time and their earnings were now more secure on a digital platform. According to major DFS providers, although the cash-out rate is high in the first few months of digital wage disbursement, this cash-out frequency reduces over time as workers start to feel more secure with having their money in a digital form.

### **Information asymmetry about costs, utility and technology among management and workers hinders faster adoption**

According to 90 percent of respondents, the major challenge with the transition process was that the costs associated were higher than initially expected. Most first movers did not have a clear idea about the costs associated with the transition and had not embarked on any in-depth cost-benefit analysis before digitizing.

The second hurdle for 60 percent of respondents was that they had a hard time finding a capable DFS partner who could scale up the implementation at the shortest possible time and in the most cost effective method. There were also pockets of resistance from different management groups, especially from line level management within factories, as they had the most to lose if they were involved in malpractices.

**Workers' current tech ability is also one of the hindrances to wage digitization at this moment.** Most of the factory workers, although familiar with mobile technology and basic functions, have not utilized mobile applications before related to financial services. They have an irrational fear of digital systems mainly due to unfamiliarity but are quick to adopt a system once habituated.



# 82%

**of apparel manufacturers stated they'd digitize their wages if a capable DFS partner was available**

**There are currently limited avenues available to workers for conducting digital transactions.** Hence, there's a need for frequent cash-outs, which can be quite expensive for some low wage workers. The merchant ecosystem has to be developed further, which would allow workers to conduct more digital transactions and less cash based transactions. Less frequent cash-out means using DFS will become much more affordable.

## **Greater buy-in from buyers would influence suppliers to digitize their wages faster**

In strong alignment, 100 percent of apparel manufacturers stated that they would digitize their wages if it was a requirement from their buyers. 82 percent of respondents stated that if there were capable DFS providers in the ecosystem, they'd digitize their wage disbursement. Among internal factors, 100 percent of respondents stated that they'll digitize if it saved them down time and increased efficiency and 82 percent stated that they'd digitize if it helped them have stronger control over factory level management, as digitization is a strong tool capable of creating accountability. 90 percent also stated that if digitization meant they'd qualify for any form of tax-rebate, they'd be willing to digitize faster.



### **The government is in favor of wage digitization but are cautious about overregulating the apparel industry**

The Bangladesh government is highly focused on building a 'Digital Bangladesh' and the Prime Minister's office collaborates with the ICT industry on development of digital infrastructures in different sectors of the economy. Government wages have already been fully digitized and social safety net payments are soon to follow.

Despite being the largest export engine, not many digital interventions have been carried out by the government in the apparel sector. However, officials believe that digital transition is inevitable for the industry if the country wishes to remain competitive in the global landscape.

**They have also stated that the industry is already highly regulated and they do not wish to impose further sanctions by making digitization a mandate.** They are, however, in strong support of digitization and believe buyers endorsing wage digitization more decisively would push industry leaders to digitize faster and the rest would follow suit.

### **Greater collaboration between buyers, suppliers and DFS providers will drive wage digitization faster**

In order for the industry to prioritize wage digitization, stakeholders of the industry need to work in tandem to create greater impact.



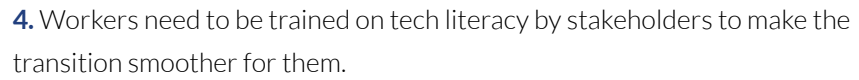
**1.** The ecosystem of merchants who accept DFS payments needs to be deepened by the DFS providers in order to increase adoption among workers. If workers do not have enough outlets to transact digitally, they will not see the benefit with a digital system.



**2.** The wage digitization process neither falls on a continuum nor is there a one size fit all approach. Each factory has its own requirements and different time frames in which wage digitization can take effect. Suppliers must have enough options to digitize at a rate that is realistic and with a DFS partner that works best for them.

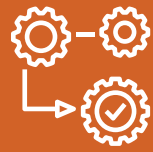


**3.** Additionally, buyers and suppliers need to work in alignment in order to drive the digitization agenda among factory owners. Creating digital advocates among large suppliers and hosting platforms for knowledge sharing of buyers on digitization would greatly facilitate the process.



A central illustration of a woman with brown hair, wearing a blue top, surrounded by various digital and physical payment methods. Dashed lines connect the woman to several elements: a smartphone displaying a shopping cart and 'PAY' with an 'SMS' bubble; a credit card; a laptop screen showing 'PAY'; a wallet containing a green banknote and a gold coin; a stack of gold coins; a blue calculator; a smartphone displaying a mobile payment interface; a smartphone displaying a target icon; a blue credit card; a green banknote being processed by a machine; and a smartphone displaying a document. In the bottom left, there is a stack of green banknotes and a yellow envelope containing more green banknotes.

# RECOMMENDATIONS FOR THE INDUSTRY



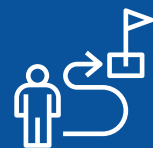
## DFS providers need to deepen the ecosystem of merchants

- Map transactional needs through assessment of workers' current non-DFS usage
- Target location-wise merchant development for key commodities in mom-and-pop shops
- Utilize agents in pilot areas to disseminate information to workers on transaction opportunities and reduce cash-out frequency
- Train agents to provide better customer support for workers, especially women, and strengthen complaint mechanisms



## Workers need to be trained on tech, MFS and banking operations by stakeholders

- Study current knowledge deficiency of workers on tech, MFS and banking operations
- Create a curriculum that has a combination of financial and tech content, tailored for workers
- Deploy curriculum through social information dissemination activities and training sessions from the factory's end



## Buyers need to create a pathway for digital adoption among factory owners

- Outline the current usage of cash and associated costs in apparel factories
- Work with factories to develop industry best practices for digitized wage disbursement
- Create greater acceptance among factory management through clear message of digitization and its benefits
- Support factory owners in choosing which wage disbursement method is most beneficial for them
- Disseminate learnings from the first adopters to persuade the digital aspirants



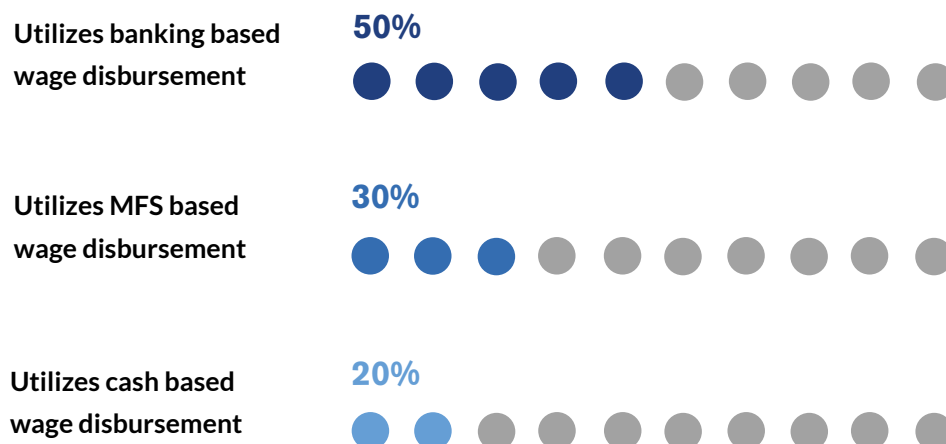
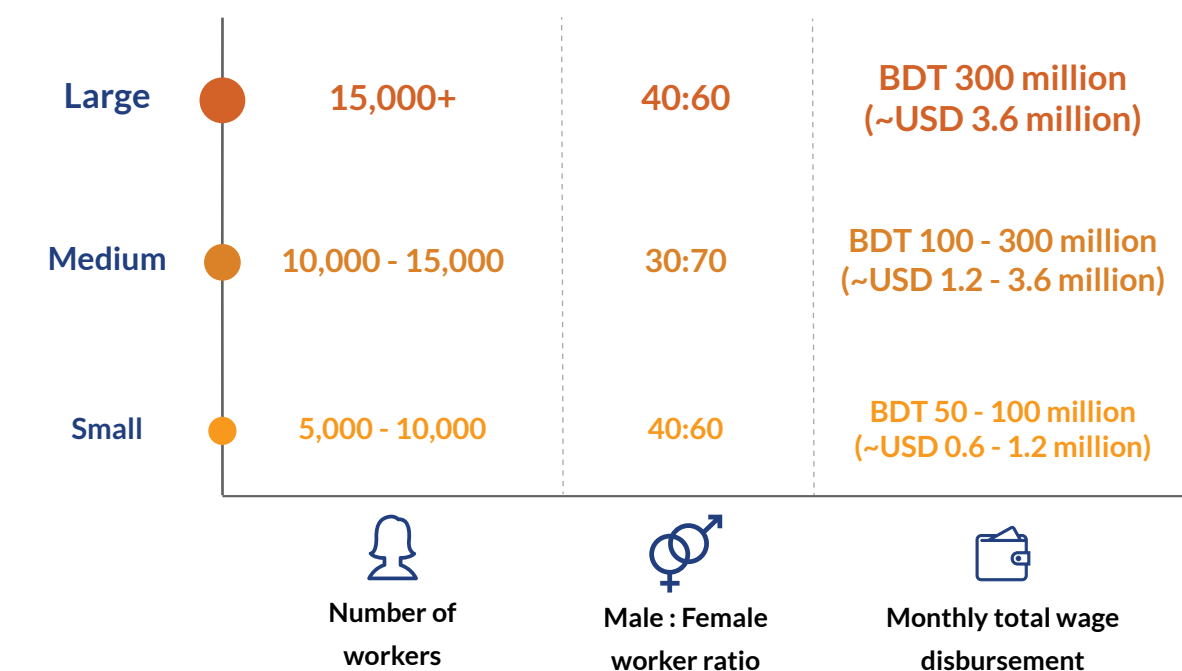
## Stakeholders need to foster greater alignment in their approach

- Outline current initiatives and government policies for digitization in Apparel and regulations for DFS providers to show alignment and opportunities
- Study digitization requirements of stakeholders to develop Fintech, IT and DFS products and services tailored for the apparel sector
- Instigate greater dialogue for wage digitization by creating platforms for first adopters to voice their learnings and advocate wage digitization
- Explore how existing regulations could be reformed for greater financial inclusion of workers and acceleration of digital payment ecosystems



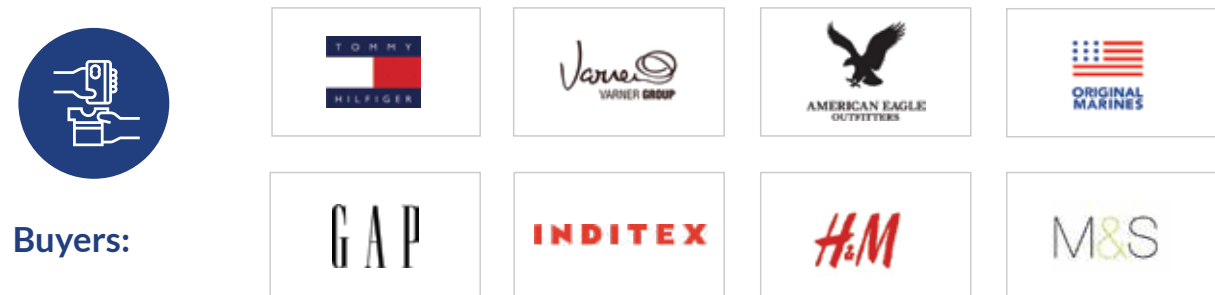
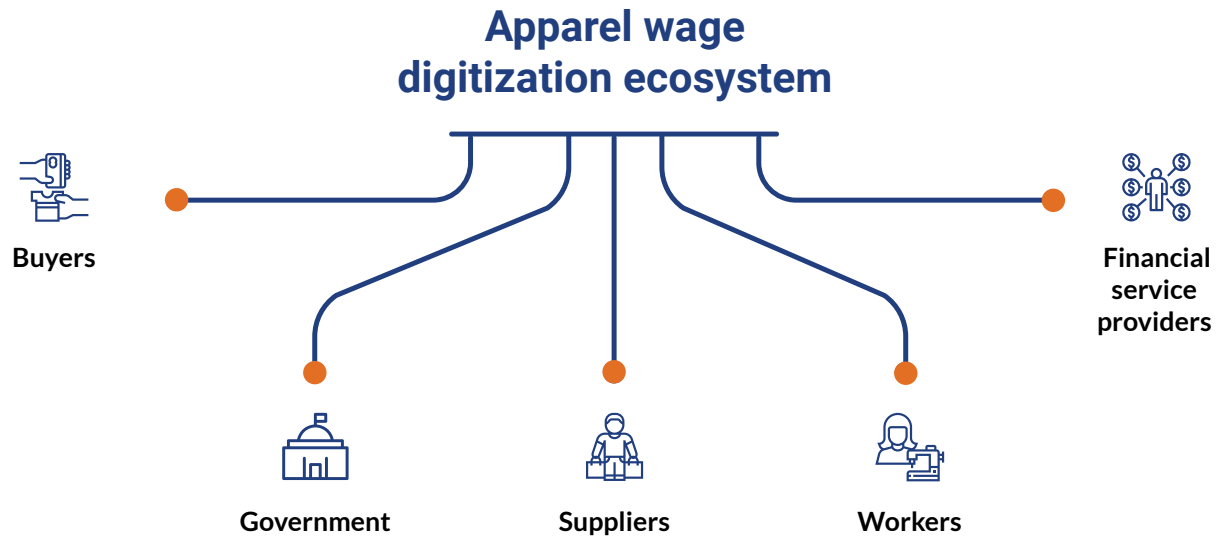
## METHODOLOGY

Interviews were conducted with industry professionals and factory owners to gain actionable insights about the state of digitization in the apparel industry. In the process, 40 in-depth interviews were conducted with a structured questionnaire. Respondents have been in the apparel industry for 10+ years on an average and have a wide berth of expertise in worker development, factory management and project implementation.



70% of apparel manufacturers interviewed are using a combination of DFS and cash for wage disbursement.

# KNOWLEDGE PARTNERS



**Government:**

- Access to Information (A2i)
- Bangladesh Bank
- Ministry of ICT
- Ministry of Labor
- Ministry of Finance

**Suppliers:**

- 25 factories
- BGMEA

**Workers:**

- RMG workers
- Awaj Foundation
- A worker union

**Digital financial service providers:**

- Dutch Bangla Bank Ltd
- bKash



# **THE APPAREL INDUSTRY AND DIGITIZATION FOR SOCIAL IMPACT**

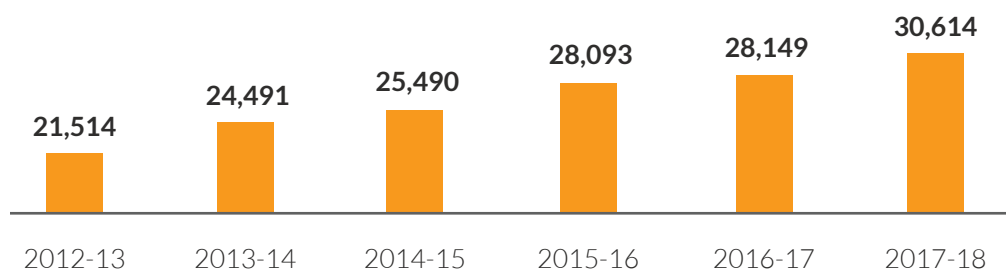
## 1.1 The apparel sector and its impact on economic development

**Bangladesh economy has been undergoing steady transformation, over the last two decades, with increasing trade liberalization, apparel and remittance driven growth and rising domestic middle-income population**

As a star regional performer in terms of macroeconomic indicators, the Bangladesh economy is set to progress as a middle-income nation within less than a decade. With rising economic growth, the population, in general, has been experiencing rising economic prosperity. According to a study by Boston Consulting Group (BCG), the middle-income population stands at 11.7 million, which is expected to quadruple within 10 years<sup>7</sup>. Although the sectors catering to the domestic market are gaining prominence, the main economic contributors happen to be export driven. Among them, the Apparel Manufacturing Industry has the highest impact, contributing around 11 percent of the GDP and employing 4.2 million workers, 80 percent of whom are women.

Apparel sector has been providing much needed impetus, especially in terms of employment generation, mostly among the population group earning \$150 monthly per household. Further growth in the sector would contribute in terms of employment generation among the semi-skilled and un-skilled labor force.

### Apparel export trend (USD millions)



Source: EPB, BGMEA

### There are looming impediments to the growth of the apparel industry

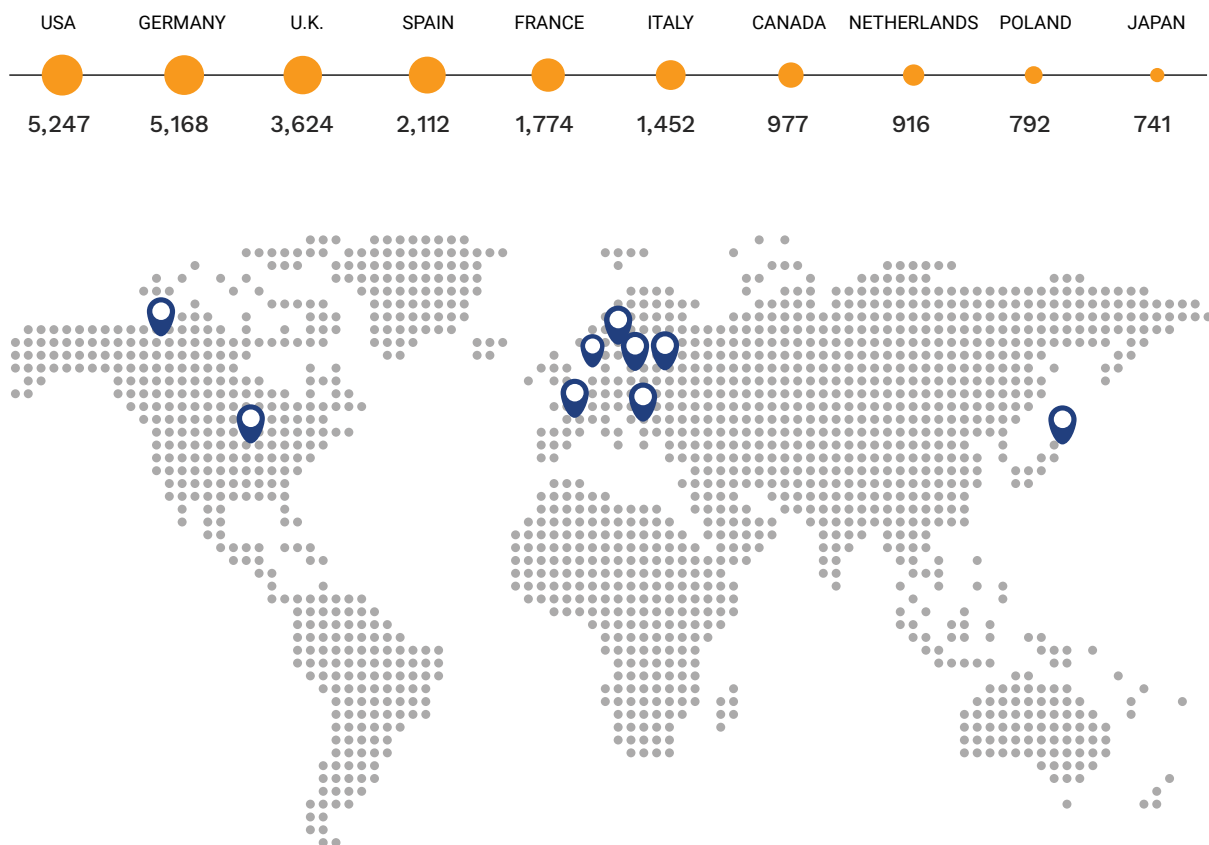
The Rana Plaza<sup>8</sup> incident and subsequent compliance drive from the Accord and Alliance led to the closure of 1,200–1,500 factories. According to industry insiders, currently 2,500 plus factories are in operation. Although the industry is moving in a positive trajectory with higher exports year on year, the challenging macro environment related to changes in the global trade climate might affect growth.



The cancellation of the Trans-Pacific Partnership (TPP)<sup>9</sup> has benefitted Bangladesh at the expense of Vietnam and the China-US trade war may benefit Bangladesh due to a possible shift in orders and potential capital flight from China.

The apparel sector is currently exploring new markets in South East Asia and Eastern Europe as well. Additionally, Bangladesh's graduation as a middle-income country by 2024 will strip the sector from GSP plus facility in the EU market (50 percent of total exports). Emerging African producers like Ethiopia may also get a leg up from AGOA ensuring tariff-free access to the US market.

### Top export destination (USD millions)



Source: EPB, BGMEA

7. Bangladesh The Surging Consumer Market Nobody Saw Coming, BCG, 2015

8. Dhaka Rana Plaza Collaps: Pressure Tells On Retailers And Government, BBC, 2013, Accessed On: 17/01/2019

9. Trans-Pacific Partnership (TPP), USTR, 2018, Accessed On: 17/01/2019

## 1.2 The case for digitization in the apparel sector

### **There's a strong business case for digitization of operations, supply chain and wages**

In order to stay competitive in the global market, the apparel industry needs systematic change in its operations and development of its workforce and one of the key components of this change is the digitization of all aspects of its operations. It improves efficiency and saves down time, which is one of the key challenges in the apparel industry. Wage digitization is an initiative that is not only beneficial to the business but also to the workers.

Digitization of wages has proven to be an effective tool to not only increase financial inclusion but also increase women's economic participation, in effect contributing to Sustainable Development Goals of No Poverty (Goal #1), Gender Equality (Goal #5) and Decent Work and Economic Growth (Goal #8).

According to Better Than Cash Alliance (BTCA)<sup>10</sup>, for apparel manufacturers, digitization has proven to improve efficiency due to reduced transaction costs, higher productivity and better cash and business management. It also contributes to increased revenue as businesses are now equipped with data analytics for business development and are able to target new business opportunities. Additionally, wage digitization also creates greater transparency and security in the wage disbursement process.

Lastly, it fosters stronger business relationships with increased supplier loyalty from brands, reduced worker turnover. According to BTCA, GAP INC has digitized wages for 95 percent of its factory workers in India, resulting in improved efficiency through time savings equivalent to 16 additional full time workers on the production line. Worker attrition and turnover reduced by 15 to 20 percent and 150,000 workers across 110 factories now have bank accounts contributing to greater financial inclusion in India. Globally, 67 percent of wages are disbursed digitally and its imperative that Bangladesh adapts similar strategies for wage digitization in order to not only benefit the businesses but also contribute to greater financial inclusion.

## Benefits of digitization



### Improved efficiency

- Reduced transaction costs
- Higher productivity
- Better cash and business management



### Increased revenue

- Growth of suppliers/ distributors through access to capital
- Data analytics for business development
- New business opportunities



### Greater transparency and security

- Transparent and traceable transactions
- Better fraud detection
- Higher personal security



### Stronger business relationships

- Suppliers/ distributors: Increased loyalty
- Employees/ workers: Reduced turnover
- Consumers: Better products
- Government: Strategic partner

Source: BTCA

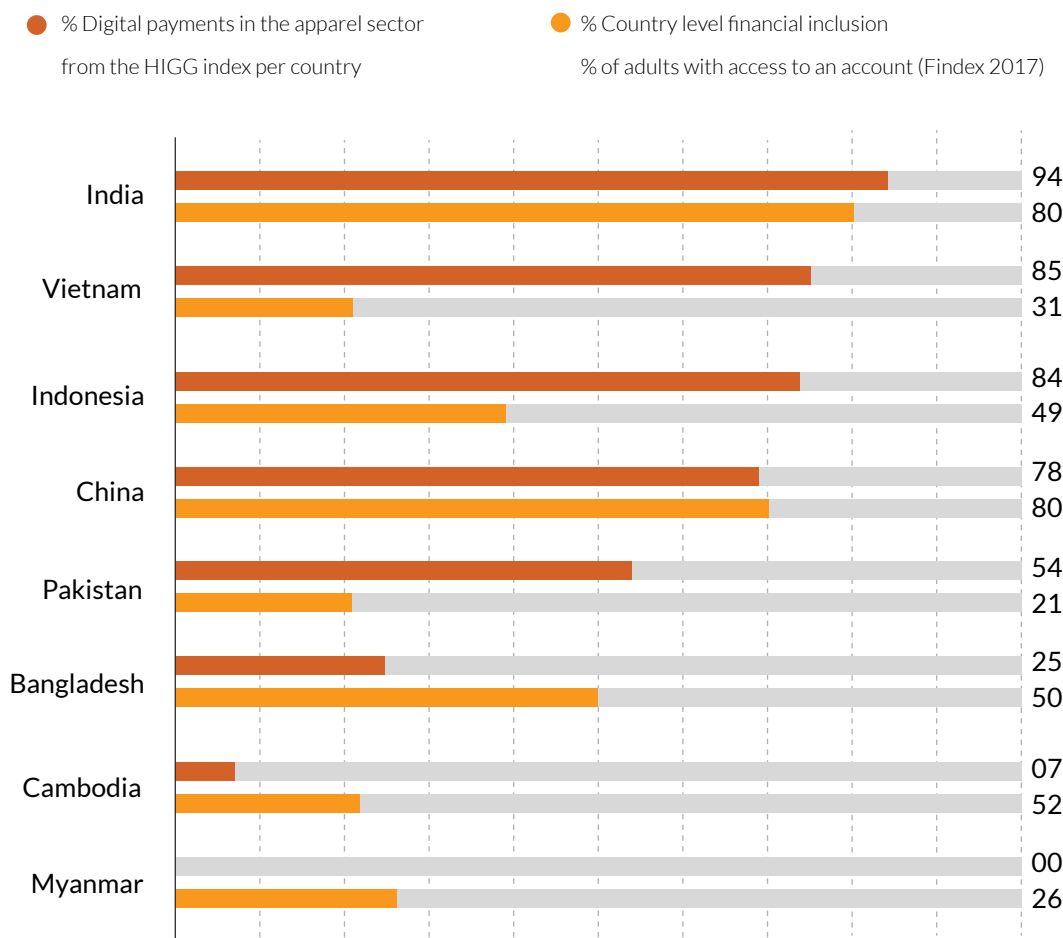
BSR's HERfinance program in Bangladesh works with a multitude of buyers such as H&M, Marks & Spencer, Target and Li & Fung among others to promote and implement wage digitization in their suppliers' factories. The program has reached 100,000 workers, 60 percent of whom are women and 53 percent of garment factories have experienced savings in staff time after switching to mobile payments.

## 1.3 Digitization creating higher financial inclusion

### Higher financial inclusion and increased digital payments in the apparel sector are strongly correlated

India is leading in Asia with the highest percentage of financial inclusion and digital payments. In comparison, Bangladesh is in the sixth position after Pakistan. Financial inclusion in Bangladesh has been growing steadily, propelled by the advent of mobile financial services (MFS) in 2010 with the entry of bKash, country's leading MFS provider. Given the rapid digitization of the country and the population's astounding ability to leapfrog technology adoption, as evident by the 85 million mobile subscribers (BTRC), 45 million smartphone users (GSMA) and 35 million mobile internet users (GSMA), Bangladesh is also predicted to experience accelerated growth in financial inclusion. In 2017-18, about 2 million adults opened their first account to collect wage payments from a private sector employer in Bangladesh (Gates Foundation).

### Comparison of wage digitization and financial inclusion by country



Source: HIGG Index, Findex 2017




- Wage digitization motivates unregistered users to register, creating opportunities for greater use of financial services.
- In 2014, only 18 percent of adults paid a utility bill and 90 percent of it was in cash but in 2017, the number of adults who paid a utilities bill increased to 31 percent, but the number of people paying in cash decreased to 55 percent.
- Of the total wages paid last year in Bangladesh, approximately 80 percent were paid in cash and 4 percent were paid via mobile money.
- According to Financial Inclusion insights (FII) 2018 report, thirty-five percent of Bangladesh adults were digitally included via a registered mobile money account and/or a bank or NBFIs account that offers digital access.

These encouraging leaps in financial inclusion show that the country is moving past its nascent stage and as key formal sectors, such as apparel, adopt digital wage disbursement, it creates greater impact on the overall financial inclusion of the country.

With most systematic changes in an industry, the transition phase is plagued with challenges. From high charges for transaction, workers' tech literacy, lack of proper digital infrastructure, inadequate DFS providers and resistance from current factory level management workforce among others, the apparel industry is facing a lot of deterrents to digitization. However, it is crucial to see that wage digitization is beneficial to both businesses and workers when done right.

Meaning, it's imperative to explore the best management practices of this digital transition in order to scale up. Wage digitization is not a transformation that can be deployed in just a few weeks for a typical factory in Bangladesh. It's important to realize that this is a long-term change process that requires support from industry stakeholders and strong buy-in from the brands.



# **THE CURRENT STATE OF DIGITIZATION IN THE APPAREL SECTOR**

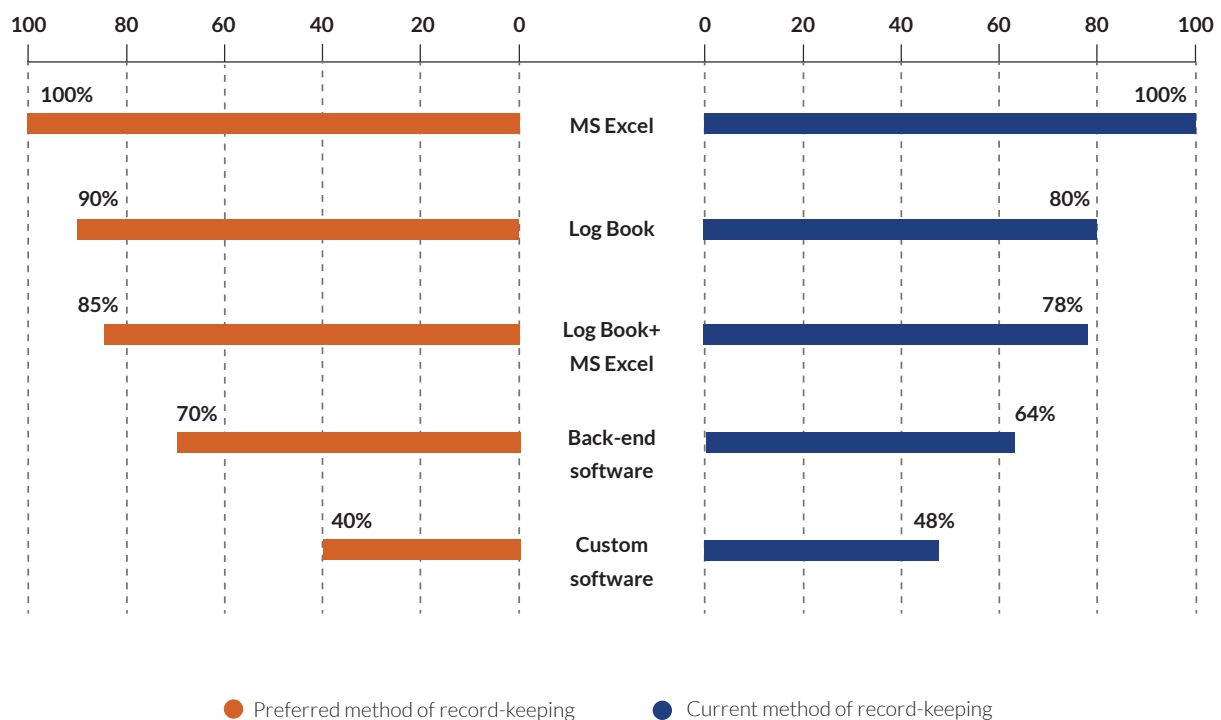
## 2.1 The advent of wage digitization in the apparel sector

### A solid foundation of IT infrastructure already in place ensures a smoother transition to a digital wage disbursement system

It's important to have the proper technology infrastructure in place to ensure a smooth transition to a digital wage disbursement system. Most factories either already have a digital record-keeping system or are investing in one as it has become a necessity to ensure efficiency.

Currently, all factories use MS Excel to maintain record-keeping for salary disbursement and around 78 percent use a combination of excel and log book to record salary disbursement and also other records. **Although only 64 percent of factories have back-end software in place, 90 percent do want a back-end software.** However, it is not cost effective yet for all to invest in a back-end based solution. Hence, there's demand within the industry for service providers that can offer cheaper alternatives than their global counterparts.

#### Current method vs preferred method of record-keeping



Most management staff are familiar with MS Excel and are more comfortable using spreadsheets compared to other software. Manufacturers who were unsure about digitization and wanted to stick to their current method of record-keeping, cited training of employees in a new software being costly as one of the major reasons for not transitioning to a digital system. Around 90 percent said that they'd need to hire new resources in order to run the system and 78 percent stated that their current employees are used to the manual method of record-keeping and the change would be met with resistance from these employees.

However, manufacturers see the benefit of digitization as they've either digitized their supply chain management system or their employee attendance and salary tracking system. Those that already had a digital record-keeping infrastructure in place had a smoother transition to a digital wage disbursement system, compared to those that did not integrate digital solutions into their operations.

### **The combination of steep upfront costs and lack of economies of scale mean small factories are less likely to digitize**

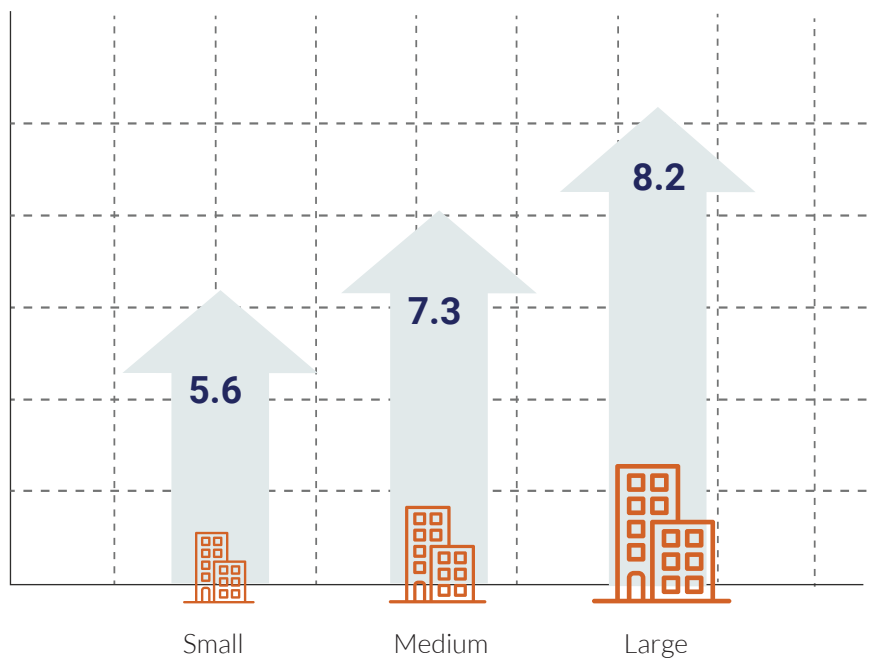
HR managers see the challenges of a manual record keeping method as 90 percent have stated that it takes a long time to tabulate salary payment and 84 percent have agreed that it is harder to store records. A manual record-keeping method also hinders management from making calculated business decisions, as the data is not readily available for analysis.

Small category factories, with a number of workers from 5,000 to 10,000, are less inclined to digitize as they're already either operating at razor thin margins or in a sub-contracting model and are not willing to invest in a costly system if there is no immediate necessity. Mid-tier factories, with a number of workers from 10,00 to 15,000, see the benefit more clearly as they're at a stage where their main focus is business growth and capturing a larger market share. They see the potential need for digitization in the future from prospective buyers and are willing to digitize. However, most are still reactive to the industry change than proactive.



Large factories, with 15,000 or more workers, are more willing to digitize than the rest as they see the global transformation of best practices of the industry more clearly. They see digitization as more of a current business necessity than just as a potential ask from buyers. They are willing to adapt to new systems in order to stay competitive in the global market. Among the large tier factories, the ones that are still on the fence, are willing to digitize as soon as they see a more imminent need from buyers or regulators. With a larger worker pool, they're the ones most affected by the challenges with cash and understand the need for digitization in order to conduct business more efficiently.

### Willingness to digitize their wage disbursement system (on a scale of 1 to 10)





# **WHY APPAREL FACTORIES WANT TO TO DIGITIZE**

### 3.1 Challenges with a cash based system

#### All factory owners agree that challenges of using cash for wage disbursement outweigh its benefits

According to 80 percent of factories interviewed, the major challenge with using cash was security of transport and disbursement. For larger factories, this risk was much more prominent compared to the rest, as every month, **on an average, they need to transport close to BDT 150 million to 200 million (~USD 1.8 to 3.6 million) in order to pay wages in cash.** Most factories are on the outskirts of Dhaka city, a two to three hour drive, while most banks are highly centralized within city business hubs.

Some banks do have branches on city outskirts, capable of holding this amount, but are still at a significant distance from factory locations. Hence, there's no alternative to transporting these large sums of cash every month. Often highways are not patrolled and security is of grave concern as most people within locality know that cash will be transported to factory premises at the start of the month.

The second most challenging factor was malpractices carried out by line level factory managers, according to 56 percent of respondents. Cash allowed line managers to either create fake worker on log sheets or to take payments from workers, in the form of bribes to ensure their job security. **After a transition to a digital system, these pilferages reduced to almost zero instances as now there was higher accountability among line managers.** The transition also gave much more power to workers as now there was a digital footprint of payment and no one could take away a portion of their salary or give them less than what was owed.

Other challenges of using cash included the manual management and tracking necessary for disbursing cash close to a thousand workers at a minimum. Factories need to assign more resources during salary week just to carry out this cash management, which meant loss of work hours and inefficiency. Although, 27 percent noted that they receive fake or damaged bills, it is typically remedied by the banks themselves by changing the bills. However, it is still an additional step that needs to be carried out by the factories, which again results in inefficiency.

## Major challenges with cash based disbursement



## 3.2 Factors that convince owners to digitize wages

**Due to the regimental organization structure, the decision making process is a highly top-down approach**

The first point of contestation to digitization comes from the factory owners or suppliers. The owner needs to clearly see the business case in order to make the investment decision. For some, the benefits are clearer compared to others. Buyers who are advocates of wage digitization are also an influential medium to convince apparel owners to transition to a digital system.

For most, the challenge of implementation lies in two folds, educating the worker group on tech and financial usage and convincing factory management to adapt to the change. The management organizational structure in an apparel factory is highly regimental and any decision cemented by the owner is highly likely to take effect faster if top management within the factory is pushing to achieve the same objectives.

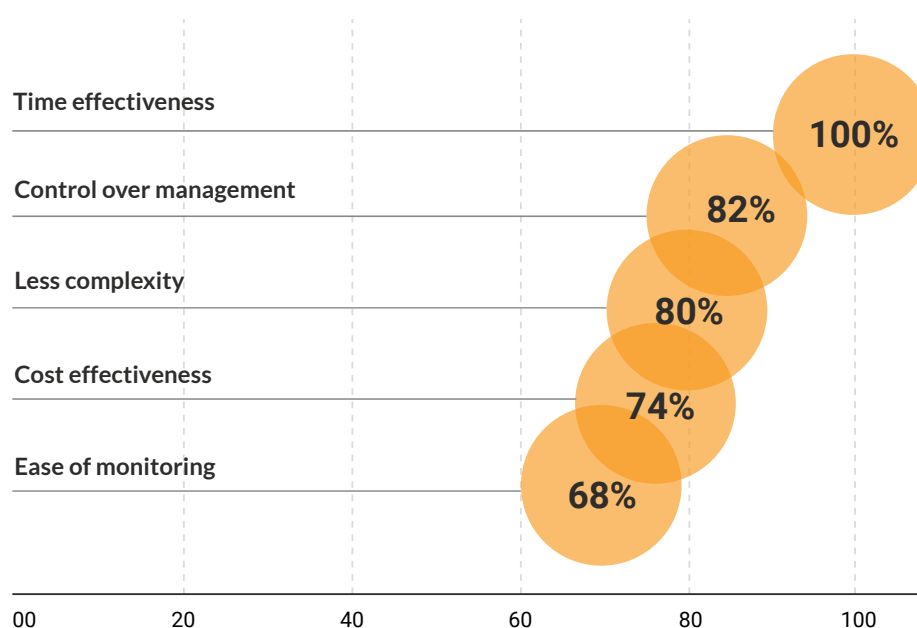
All owners agree that if it saves them down time and increases efficiency, they'll invest in digitization more proactively. **82 percent of factory owners stated that if digitization gives them more visibility and control over management, they're more likely to digitize as well.** Similarly, less complexity, cost effectiveness and ease of monitoring were the other benefits

that factory owners want from a digitized wage disbursement system. While most owners agree on the importance of cost saving, they do not necessarily keep track of the intrinsic cost or opportunity cost of not digitizing i.e. loss of man hours, cost of transport, etc. Hence, digitization also gives them greater visibility of their cost components and cost savings.

All apparel manufacturers also agree that if it became a mandate from buyers to digitize their wage system, they are more likely to transition faster. However, some mid-tier and smaller factories expressed concern about transparency. They are comfortable with transparency within the factory as it gives them higher visibility but are not convinced that the transparency to an external audience, specifically buyers, would affect their business positively. This is due to the fact that transparency of over-time (OT) of workers is a key challenge of the apparel industry and they fear wage digitization would bring this challenge more into the forefront.

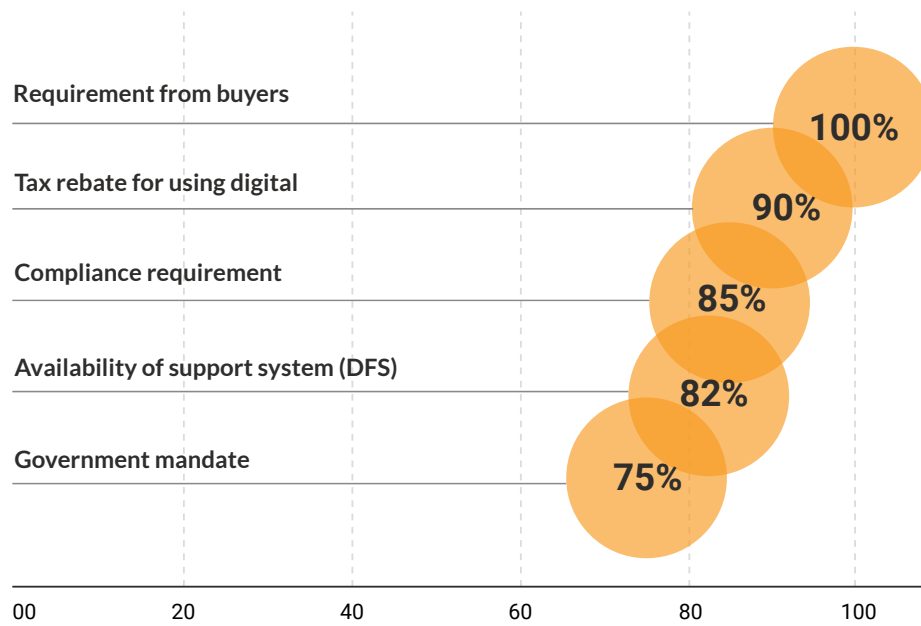
However, larger and some medium level factories agreed that if buyers are satisfied with the level of OT they operate in during high production season, they have no issues with transparency of wage disbursement and their operations to the buyers. All apparel manufacturers, legally, through various financial maneuvering try their best reduce tax and take the most benefit out of the taxation system. Hence, according to 90 percent of the respondent, any form of incentive from the government that reduces taxation on the industry, would be instrumental in driving wage digitization.

### Internal factors that would convince factories to digitize wages





## External factors that would convince factories to digitize wages



### 3.3 The benefits of wage digitization

**For the factory owners, the major benefits are efficiency and transparency**

**1**

#### **Time saved in operation**

From the digitized factories, 82.5 percent agreed that digitization saves time during salary disbursement. Although the banking processing time still remains 24 to 48 hours, there's significant time saving during the wage analysis process (if internal systems have been digitized) and even higher time saving during salary disbursement. Workers no longer have to line up to receive their wages and there's a significant saving of downtime during the salary disbursement week due to this.

**2**

#### **Easier to calculate salary and monitor disbursement**

83.5 percent of digitized factories agreed that digitization of their employee attendance system and integration with wage disbursement helps them do their job much more efficiently as with a digital platform monitoring and reviewing is seamless. With a large workforce, it becomes trickier to calculate and to maintain records.

90 percent of factories have stated that there's a variable portion to the salary component of their workers on top of the government mandated base and recording this variable portion based on over-time or piece-rate payment is highly challenging if a proper digital system is not placed. Disbursement is also much easier with a digital system as digital footprints of each disbursement is recorded instantly. This resulted in the inevitable reduction of malpractices and pilferage.

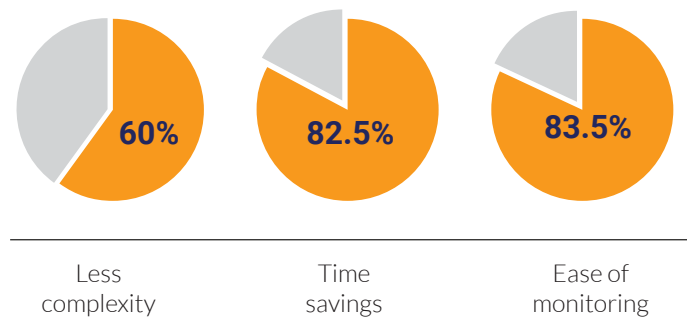
**3**

#### **Less complex to maintain compared to a manual system**

Each individual worker has a salary sheet maintained by the factory, to record monthly work days and work hours in order to pay the stipulated salary. Hence, different worker groups have different pay scales and payments and it is challenging to maintain the record every month if it's on a manual system. 68.5 percent of respondents stated that a digitized system reduced this complexity as starting from a worker entering the factory to the work hours, everything was digitized and recorded in real-time and the management of this record required less effort after digitization.

Additionally, owners were now equipped with real-time data that helped them make strategic decisions needed to increase business productivity much faster.

## Benefits of wage digitization as stated by factory management

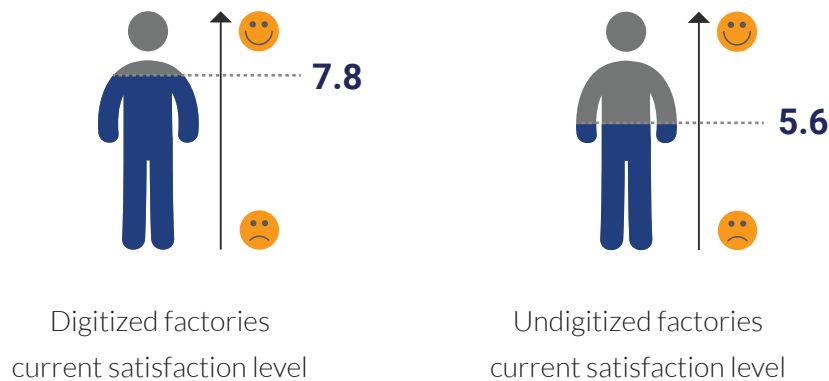


4

### Satisfaction level of management is high

The digitized first movers are also considerably much more satisfied with their wage disbursement system compared to a cash based system. The cash based factories are somewhat satisfied with their current system but agree a much more efficient system would facilitate business growth. On a scale of 1 to 10, 10 being the highest level of satisfaction, factories who were digitized, rated their current satisfaction level to be 7.8, while factories who were still operating on a cash based system, rated their current satisfaction level as 5.6.

### Satisfaction level with wage disbursement system (On a scale of 1 to 10)

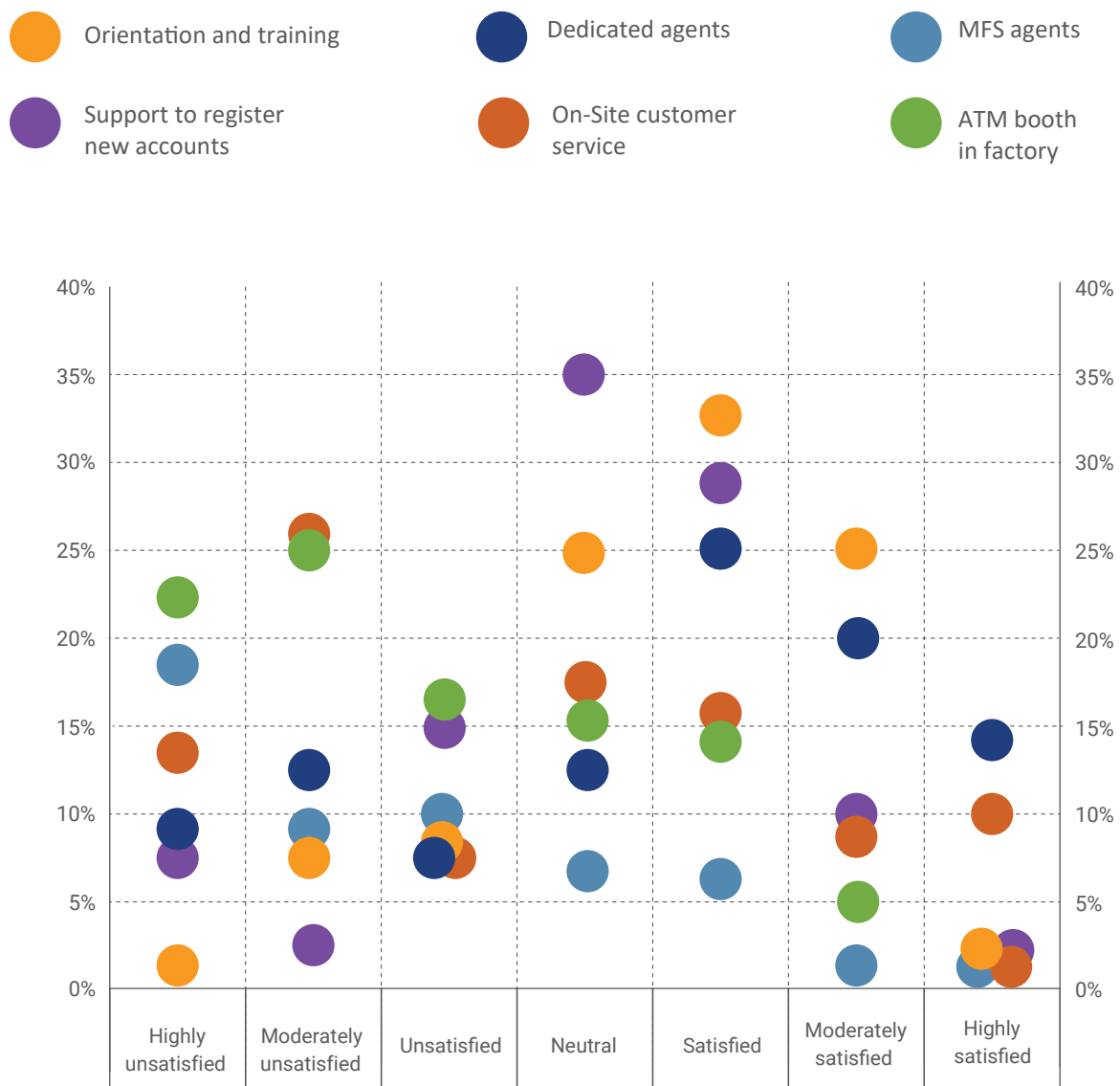


5

### Satisfaction with individual service points is high

On individual service points, generally, all satisfaction level ranged from satisfied to highly satisfied with a few exceptions on individual service points specific to a digital medium of wage disbursement. For instance, the unavailability of adequate MFS agents in the factory vicinity and their inability to handle large demands for cash during salary week was the most challenging factor for most.

### Factory owners' satisfaction level of individual service points



## 6

**Workers have more control over their salary**

Due to digitization, workers now had more control over their salary as malpractices reduced significantly. Although not clear at first, the benefits of digitization were slowly materializing among worker groups **as they became more habituated with the system.** It saved them time in sending money to their villages and provided security from muggers when travelling.

According to major DFS providers, although cash-out rate is high in the first few months of digital wage disbursement, this cash-out frequency has reduced over time as workers are starting to feel more secure with having their money in a digital form. Since each wage was now digitized, it did not pass through the hands of the line managers and this ensured, each worker received their stipulated salary in its entirety. In some cases, the records of wages disbursed in a digital format also gave workers enough information to tackle management who were depriving them of a fair wage.

Benefits of wage digitizing became evident for most factories after a certain period of time. During this transition period, however, there were numerous challenges the digitization process that factories faced. In order to ensure a smoother transition so that more factories see the benefits much more clearly, the challenges need to be addressed systematically during the implementation phase.

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# **THE CHALLENGES TO WAGE DIGITIZATION**



## 4.1 The digitization process

The wage digitization process is neither on a continuum nor is there a one size fit all strategy. In order to implement wage digitization more effectively, it is imperative to understand the diversity of digitization in the apparel sector and that each type of factory has its own incentives behind choosing a certain DFS system.



### Wage digitization with a banking system and IT infrastructure in place

DBL Group falls into the large factory category with over 30,000 workers currently working in their factories and the apparel manufacturer has its own Sustainability department focusing on sustainability and workers' wellbeing.

One of their goals was to digitize their workers' salary as they believed it'd improve efficiency. Being a large group of companies, they already had a state of the art digital infrastructure in place and was already working with Dutch-Bangla Bank Limited, the most renowned bank in the apparel industry for worker wage disbursement. The bank approached them with a proposal of transitioning their worker by cohorts and within 1.5 years they've digitized 7,000 workers' wages.

Dutch-Bangla Bank Limited has set up their ATMs in one of the factories and would add further machines on requirement basis for successful transitioning. For DBL, the digital transition was less of a challenge as management was convinced of the benefits of digitization and they had a strong relationship with their banking partner to ensure placement of ATMs in their premises. The challenge they face now is scaling up the digitization process.



Wage digitization is a very fast, secure and convenient method for disbursing wage to the workers. Their money is safe from theft. There is the convenience of saving money and workers are able to send money back to their villages in a fast and secure way with less cost. The banking industry is able to have a wider customer base and come up with innovative products and services for the low income population. Digitization is the inevitable future.

- M. A. Jabbar, Managing Director, DBL Group



### Wage digitization with a banking system and custom IT infrastructure

Noman Group falls into the large factory category, with more than 70,000 employees in their factories and were one of the first few to digitize their wage disbursement process with 45,000 workers at once and gradually included the rest in the following months. They were one of the first to build their own custom digital infrastructure for their supply chain management process and connected to the bank with EDI (electronic data interchange). For wage disbursement, they had to build a digital system with secured biometrics from scratch with the support of their separate Information Technology firm. Their strong IT backbone has helped them to be cost effective and with close collaboration, make digitization easier to implement.

Noman Group chose DBBL (Dutch Bangla Bank Limited) as one of their first banking partners from the starting of their business. Due to a strong human resource management team and industrial management, they have held multiple workshops and induced the training during recruitment process to make digital disbursement user friendly. The whole wage digitization process was spearheaded by the group's chairman Mr. Nurul Islam. Noman Group mentioned that they had faced some delays in designing the entire experience for the worker. Hence, they have influenced banks to open branches near the factory and ATM on the same premises as the factories.



Automation, digitization and elevating workers' experiences would ease industrial unrest, improve industrial relations and effectively save costs by apprehending illicit outflows. Most importantly, by enabling the mass populace with digital payment capabilities, we enable better financial decisions-making, eliminating the middleman and help create savings for the low income population. There is no alternative to digitization to achieve world peace and prosperity.

- Abdullah Talha, CEO and Deputy Managing Director, Noman Group.



### **Wage Digitization With A IT Infrastructure In Place And Currently Transitioning To An Alternate Wage Disbursement System**

Knit Asia Ltd falls into the small category of factory with 5,000 workers and they are in the process of re-digitizing their factories. They already had a back-end software system in place for recordkeeping and decided to transition to a digital wage disbursement system as it became important for them to reduce malpractices at the factory level. They piloted with a banking service provider but had to abandon the medium after a short period of time. The workers complained of lack of funds at ATM booths in the factory vicinity and became highly resistant to the change. Knit Asia Ltd is now actively seeking an MFS partner or an alternate solution to their problem.



Wage digitization is the unquestionable next step for us as in order to remain competitive in a fast-moving industry such as ours, efficiency is key. We've seen the impact of digitization on our business operations and want to achieve the same efficiency levels at our factories.

**- Amer Salim, Director, Knit Asia**

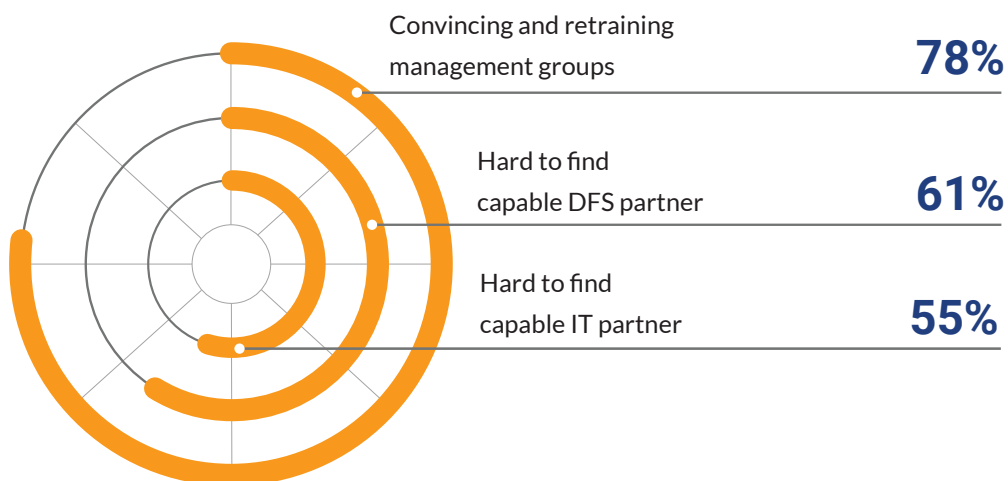
## 4.2 Timeline of implementation

**There is no one size fit all strategy to digitization but there is precedence of a gradual transition in all cases**

88 percent of factories stated that on an average it took them 1 to 2 years to transition to a digital wage disbursement system and in that time, it took 6 to 12 months just to complete the decision making and cost benefit analysis (if any) process according to 67 percent of respondents. After the first and second cohort of workers, the transition was faster for most.

According to 61 percent of the respondents, the major cause of this longer time-frame was that it was hard to find a DFS partner capable of providing service to full scale at an optimal cost structure and timeline. Additionally, according to 55 percent of the respondents, it was tough for them to find a capable IT partner who could build the benefit and compensation infrastructure in the stipulated time and cost. Similarly, 78 percent stated that convincing and retraining management groups to adapt to a digital system contributed to the lengthy time frame as well.

### Causes for a longer implementation timeline



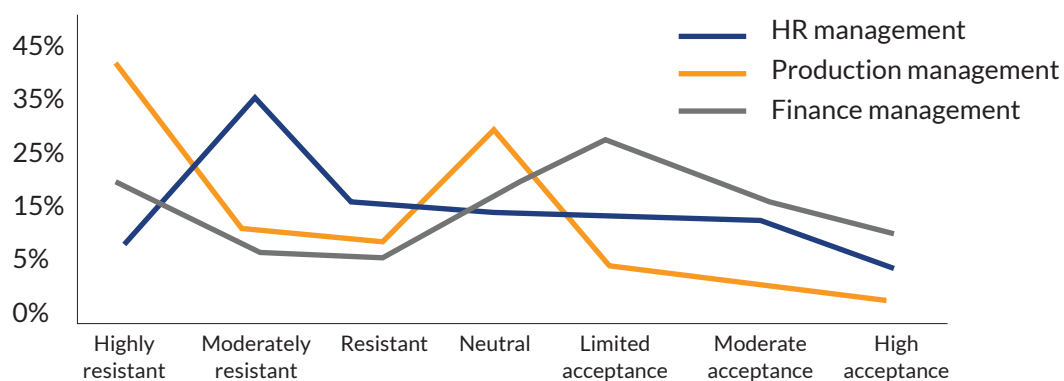
### 4.3 Acceptability among management groups

#### Initial resistance to the digital transition was expected from most groups within management

Production-level management staff had the highest level of resistance as they had more to lose with the digitization of wage disbursement. Production line level workers are the ones most prone to malpractices and often have informal arrangements with workers where they receive payment from their line workers to ensure job security or facilitate new hires. After digitization, these pilferages reduced significantly. Human Resources management staff were less resistant but still have concerns over their job security and future role, which they feared was being threatened by the prospect of digitization. Most factories that have digitized mitigated this by either retraining their staff and reassigning roles or creating new roles to fit the new requirements.

Finance management department was the least resistant to change and had a higher understanding of the digitization process. However, there were instances where local banking branches near factories, where large deposits were kept by suppliers during salary week, tried to influence factory management staff to be resistant to the change. If the wage disbursement was digitized, it would reduce the need for cash collection from local bank branches and local branches would lose deposit demand that had been routine up until now. In general, most apparel manufacturers in the industry have a strong digital infrastructure in place for supply chain management, factory management or for worker management as it has become an industry norm and a transition to a digital wage disbursement system is much more smoother for those that have already invested in a strong IT foundation. Remaining factories in the industry are also in the pipeline to digitize their operations as it would increase their efficiency and give owners greater visibility over their management and processes.

#### Satisfaction level of different management groups





## 4.4 Challenges of wage digitization

### Information asymmetry among factory level stakeholder was the underlying challenge

**90 percent of respondents stated that the initial investment required for digitization was higher than they had expected.** Most apparel manufacturers did not embark on a detailed cost-benefit analysis before adopting a certain system and were also not aware of individual cost components to the transition, e.g. training costs, service fees, ATM installation costs (banking), down-time during training and monthly IT operational expenditure among others.

**Retraining their current benefit and compensation was also challenging** according to 67 percent of respondents but a lot of assistance came from either the service provider or the implementation partner who was working with the apparel manufacturer. The second most challenging factor was the resistance from management according to 74 percent of respondents. This mainly stemmed from a lack of information on job security and roles from factory level mid management and from the fact that line managers who frequently engaged in malpractices were more accountable after digitization. This challenge was mostly mitigated by proper communication and planning in the factories that digitized factories.

Creating opinion leaders among management who were strong advocates of digitization created a receptive climate among workers and it became more demand driven as workers started perceiving having a bank or MFS account as a status symbol. There was a level of resistance from the workers also in large factories but this was easily mitigated by creating cohorts for piloting, who later became strong advocates of the services they received through digitization.

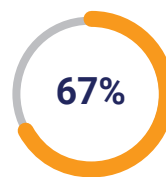
### Major challenges while adopting a digital salary payment system



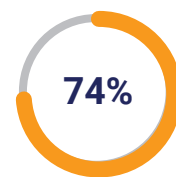
Initial investment was higher than expected



Hard to find capable DFS partner, i.e. scale



Retraining B&C department



Resistance from management



# **THE STATE OF DFS PROVIDERS IN THE APPAREL SECTOR**

## 5.1 MFS and banking usage for wage disbursement

### DFS industry is the key area where development is crucial to drive digitization

Only a few renowned banks have moved to bank the BOP market due to high investment requirement. However, the sector has moved fast and is in its nascent stages. DFS providers have stated that buyers' interest in driving digitization among their suppliers have been instrumental in driving their growth.

However, the ecosystem of merchants and vendors are in dire need of development. Strong documentation requirement to be a merchant for either MFS or banking hinders the DFS providers from increasing their distribution faster as most mom-and-pop shops in Bangladesh do not maintain stringent documentation. Low transaction and cash-out limits also act as a deterrent for DFS providers.

A more apparel focused merchant and vendor ecosystem development from the DFS providers side would help create greater traction for digitization as workers will be more receptive when they know they can utilize the digital money digitally.

#### Mobile Financial Service (MFS) providers

Cheaper smartphones from Chinese and local manufacturers have allowed the proliferation and adaption of smartphones, interestingly even among those falling into a lower income bracket. Though their tech ability is minimal, they're able to conduct basic functions and are familiar with internet services, which has contributed greatly to the development of MFS in Bangladesh. Majority of all apparel workers send money to their village after salary week and MFS is typically their number one choice due to its wide network of merchants.

Apparel manufacturers that chose MFS as their wage disbursement medium did so due to its ease of implementation and workers' existing familiarity with the system. Additionally, MFS providers such as bKash have provided steep discounts on cash-out fees either wholly or partially for a period of one to three years to help habituate the workers and help factories digitize their wages faster.

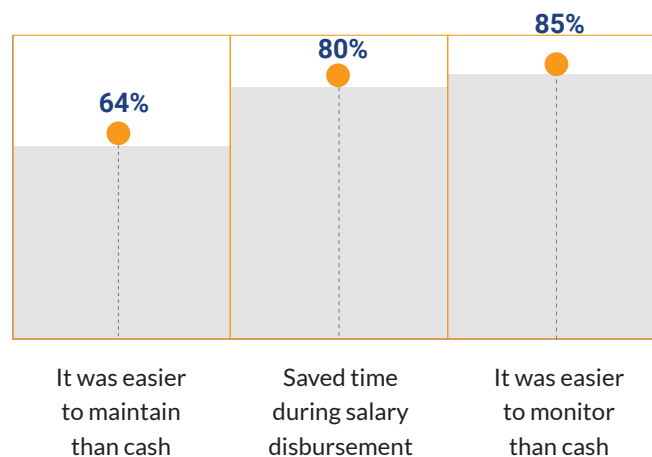
Among the factories interviewed, there were cases where workers faced challenges initially adapting to the new method. Loss of pin number, lack of

trained merchants in the vicinity of the factory and high cash charges were some of the hindrances to the adoption process. Once workers became more habituated with the system, they understood the importance of maintaining a secure pin number and the loss of pin numbers reduced.

A 1.85 percent cash out charge from the leading MFS provider may seem relatively cheap but can be a burden sometime for some of the more lower wage workers. However, both leading MFS and banking service providers have stated that they've seen a reduction in the number of cash out as workers become more habituated with the system.

Typically, workers would withdraw 70 percent of their salary within the first day of the salary received if they've been using DFS for less than 9 months. However, DFS providers have experienced a reduction in cash withdrawal if the workers have been using their account for more than 9 months. If they've been using their account on an average for 9 months or more, they usually withdraw 40 percent of their salary or less on the subsequent day after salary received. This is encouraging as workers' trust on the DFS provider means they're willing to transact more digitally and providers can invest in deepening the ecosystem of merchants who'd facilitate these digital transactions.

### Apparel manufacturer's opinion on MFS



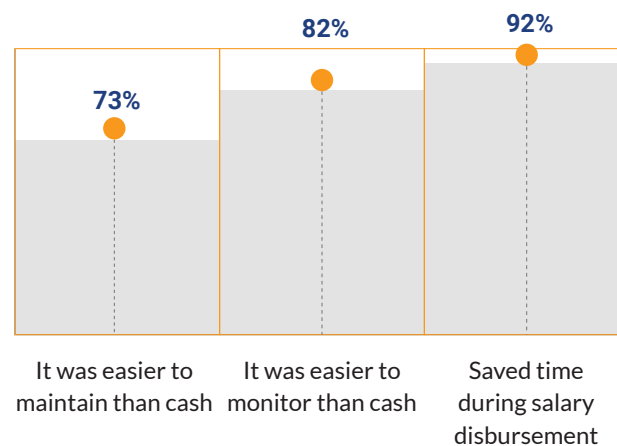
## Banking service providers

Given that all apparel manufacturers work with a bank in some capacity, they are more familiar with the banking system than an MFS provider. Hence, a lot of manufacturers opted to go for banking as their salary disbursement medium due to their familiarity with the system. It was also widely accepted among apparel workers as it was easier for them to operate an ATM machine compared to a USSD based modal interface for MFS. Although mobile applications exist for both the leading banking and MFS provider, workers are less familiar with operating applications.

The banking based disbursement system is not without its challenges, usually the implementation timeline is longer, there are stringent KYC documentation requirements from banks and given the large number of workers in each factory, there aren't always enough cash available in the ATMs in the vicinity as during the first few months cash withdrawal frequency is high.

There are flip sides to these challenges as well, although implementation process is longer compared to DFS, some factories prefer to transition at their own pace and banking providers are also willing to invest and provide ATM facilities within factory if apparel manufacturers are willing to work together. Stringent documentation requirement also means it'll enable workers to have a credible credit profile and DFS usage will indirectly create their credit footprint allowing them to access more financial products in the future that were unavailable to them before due to lack of creditworthiness.

## Apparel manufacturer's opinion on banking







# **CONCLUSION AND RECOMMENDATIONS FOR THE INDUSTRY**

With increased habituation with digitization, workers now have more control over their salary. The majority have become familiar with digital systems very fast and are starting to utilize DFS in other aspects of their lives, e.g. sending money to village, paying bills and purchasing products at departmental stores.

**Many workers are familiar with financial concepts and have the desire to save; some even have prior experience with a banking system.**

As wage was digitized, it ensured workers receiving their stipulated salary in its entirety without being defrauded by line managers. Cash-out rate also reduced over time as workers felt more secure having their money in a digital form. As the workers now have records of wages disbursed in a digital format, it gives them more control and overview of their wages. Worker unions believe digitization creates transparency for them and helps them negotiate with apparel manufacturers better.

The Bangladesh government is highly focused on building a 'Digital Bangladesh' and the Prime Minister's office engages greatly with the ICT industry on development of digital infrastructures in different sectors of the country. Government wages have been fully digitized and social safety net payments are in the process of being digitized. Government representatives agree wage digitization in the apparel industry would create greater financial inclusion and help bring in more people into the formal economy.

Government representatives are reluctant to make 'digitization' mandatory for the industry as it is already a highly regulated industry in itself. However, **they suggested that buyers can work with apparel manufacturers to help transition to the digital system faster without having to set formal regulations in place as it is beneficial for both the stakeholders.**

Major buyers with large supplier groups in the country are very aware of the need for digitization and have created a positive impact in other countries through their digitization programs. Buyers similarly do not want to create a mandate for digitization but are open to creating greater visibility on best practices for digitization and assisting their suppliers in digitizing wages. Although this intent is present, a greater buy-in or a major buyer led movement in the industry would create greater traction for wage digitization.

The industry needs to address several challenges before it can scale up beyond its current number of factories. This involves strategic actions from all levels of stakeholders and greater dialogue for the need of wage digitization.

## Ecosystem development is key to increasing receptiveness among workers



The goal is to create greater financial inclusion and worker wellbeing, as the industry growth will be highly driven by the worker group in the coming decade. In order to achieve this, workers need to be more receptive of digitization and that can only be achieved when they find greater usage of the digital services.

If payment can be made for bills, commodities and money can be transferred to their dependents much more easily, they're more likely to utilize the digital services more often, which will lead to them using more financial services and products and becoming part of the formal economy. In order to achieve this, several actions need to be carried out:

- 1 Map transactional needs through assessment of workers' current non-DFS usage. This would give DFS providers a blueprint to plan their merchant and agent acquisition more effectively.
- 2 DFS providers need to target location-wise merchant development for key commodities in mom-and-pop shops as this would create the best avenues for workers to transact digitally.
- 3 DFS providers need to utilize agents in pilot areas to disseminate information to workers on transaction opportunities and reduce cash out frequency. The more workers become habituated with new transaction methods, the less likely are they to use cash.
- 4 Train agents to provide better customer support for workers, especially women, and strengthen complaint mechanisms. Developing quality customer support system is crucial for retaining customers.

## Apparel manufacturers need to be have options for wage digitization



Right now there aren't many DFS providers in the industry and therein lies the market opportunity for a lot of financial providers who aren't currently investing in the industry. There's no one-size-fit-all option here for digitization, and the case is different for each supplier. Apparel manufacturers should have the choice to implement whichever medium they believe will be the most effective for them and it should not come as a mandate from buyers or any regulatory body. In order to achieve this, industry stakeholders need to:

- 1 Outline current usage of cash and associated costs of cash in apparel factories, which would give a better cost benefit picture to owners.
- 2 Work with factories to develop industry best practices for digitized wage disbursement and involvement of local capable IT companies would bring down the cost of implementation greatly.
- 3 Create greater accountability among management through a clear message of digitization and its benefits. This would reduce the initial resistance and information asymmetry that currently exists.
- 4 Support factory owners in choosing digital wage disbursement systems that works best for them.
- 5 Disseminate learnings from the first adopters to persuade the digital aspirants. Renowned industry advocates are a necessity to create positive perception about wage digitization.

### Buyers, suppliers and DFS providers need to work together and not in silos



Stakeholder buy-in is crucial to influence more apparel manufacturers to adopt wage digitization. Buyers have more experience in other markets with digitizing their suppliers' factories and the same can be replicated in Bangladesh if buyers take more pronounced initiatives in the industry. Greater dialogue also need to be created among the larger apparel manufacturers because they are the major stakeholders of the industry and their advocacy on digitization will help drive the agenda forward. It's also imperative to realize that the transition is not a single month or year process and requires time and commitment from all parties involved. Stakeholders of the industry need to:

- 1 Map current initiatives and government policies for digitization in apparel and regulations for DFS providers to show alignment and identify opportunities. This would give a clearer picture of the industry and influence more service providers to enter the market.
- 2 Study digitization requirements of stakeholders to develop Fintech, ICT and DFS products and services tailored for the apparel industry.
- 3 Explore how existing regulations could be reformed for greater financial inclusion of workers and acceleration of digital payment ecosystems.

## Workers need to be educated on digital platform usage to help them better reap the benefits of digitization



The major challenge hindering greater adoption of DFS among worker is their lack of tech literacy and unfamiliarity with digital platforms. In order to alleviate this issue, buyers, suppliers and DFS partners need to:

1

Study current knowledge deficiency of workers on tech, MFS and banking operations. This would give a clearer picture of the exact challenges workers are facing understanding the processes.

2

Create a curriculum that has a combination of financial and tech content, tailored for workers. Although financial literacy is important in driving greater financial inclusion, tech literacy is just as instrumental in instigating better and safer usage of DFS.

3

Deploy curriculum through social information dissemination activities and training sessions from the factory's end.

Wage digitization is an initiative that can be beneficial to both the businesses involved and workers if implemented right. Time bound initiatives need to be set in motion in order to achieve the inflection point that would increase the number of factories digitized, from 200+ to 2500+, within the next couple of years.



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- *Abdullah Talha, Deputy Managing Director, Noman Group*
- *Amer Salim, Director, Knit Asia Ltd*
- *Jamal Uddin, Inclusive Business Advisor, SNV*

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