UNDERSTANDING MSME PAYMENTS NEEDS AND IMPLICATIONS FOR THE LEVEL ONE PROJECT

An Exploration of RTRP System Design to Support MSMEs and Encourage Digital Payments

September 22, 2021 – Initial Draft for Comment

RESEARCH SCOPE

Research Goals:

The purpose of this effort is to identify potential opportunities for real-time retail payment (RTRP) system design and implications for the Level One Project informed by:

- Understanding the domestic and cross-border payment needs and requirements of Micro, Small & Medium Enterprises (MSMEs) in emerging markets
- Identifying what RTRP systems have done or are doing 'in the middle' (i.e., at the scheme, platform and service level) to facilitate and encourage MSME payments

Research Approach:

✓ Define and segment MSMEs using secondary research

✓ Outline MSME payments needs, by segment

✓ Determine how often, and in what ways, existing RTRP systems and payment service providers (PSPs) address MSME payments needs

✓ Outline implications and recommendations for the Level One Project

EXECUTIVE SUMMARY

- MSMEs represent an important and sizeable group of DFS end users in emerging economies but how well payments systems and services providers meet those needs varies considerably
- MSMEs can be segmented by number of employees, into three categories: Micro Enterprises (including Sole Proprietors), Small Enterprises, and Medium Enterprises
- Micro, Small and Medium Enterprises have some payments needs that are common across MSME segments and some payments needs that are unique to each segment
- A number of common payments needs across MSME segments are met by RTRP systems that enable capabilities necessary for modern real time retail funds transfer, e.g. 24/7 availability
- Unique needs of Small and Medium Enterprises that are larger, more mature, and tech savvy are commonly met by PSPs and closed loop RTRP systems, that can sell value-added services to MSMEs for a premium fee
- Unique payments needs of Micro Enterprises are occasionally or rarely addressed by RTRP systems or PSPs. These needs include some that are more acute for women-owned MSMEs. At the other end of the spectrum are the unique payments needs of cross-border MSMEs, which are not yet widely addressed either

METHODOLOGY

METHODOLOGY

The following activities detail our methodology

1. **Define MSME segments:** The first step was to propose globally consistent MSME segment definitions, with a particular view to those adopted in low-income and lower-middle income economies
   - One important source for informing MSME segment definitions was the 2019 MSME Economic Indicators Database which records the national definitions for micro, small, and medium enterprises (MSMEs) across 176 economies. Glenbrook sorted this database for low-income and lower-middle income economies and then generated summary statistics to inform definitions
2. **Understand payment segment needs:** Glenbrook sought to understand and identify the unique and shared payment needs of each MSME segment. To do this, Glenbrook drew upon a variety of resources including:
   - **Desk research:** Desk research included reviews of reports and case studies published by the SME Finance Forum, the IFC, ITU, GSMA, McKinsey, Ripple, Deloitte, COMESA, and others
   - **Glenbrook analysis:** Glenbrook drew upon our payments systems development experience and insights to describe MSME payments needs

METHODOLOGY, CONTINUED

3. **Identify RTRP systems and payments service providers that serve MSMEs in some way:** We identified a range of payment providers that serve MSME needs directly or indirectly:
   - The 17 service providers we reviewed serve MSMEs across a wide range of geographies and economies and reflect a variety of business models. See further detail on the next page
4. **Compare and contrast features and capabilities:** We then analyzed each RTRP system and payments service provider to understand, in what ways, if at all, each is providing capabilities to address MSME needs. To do this, Glenbrook took the following approach
   - **Desk research:** we reviewed information in the public domain to capture relevant capabilities of each RTRP system and payments service provider. Sources included company websites, case studies, and whitepapers
   - **Glenbrook analysis:** Glenbrook drew upon our experience and insights to determine how well each RTRP system and payments service provider studied addressed MSME needs. We then abstracted relevant information for the Level One Project

ASSUMPTIONS BEHIND THE WORK

As this research focuses on detailed aspects of MSME payment needs, we also want to call attention to the broader context in which MSMEs exist. In particular

- MSMEs participate within a larger payments ecosystem that includes a regulatory context, Digital Financial Services Providers (DFSPs) and payment services providers (PSPs). This work assumes that MSMEs must rely on the payment services that are made available to them through this ecosystem
- The findings here are not fully comprehensive as they are limited to what was observable from the RTRP System and PSPs studied
- The findings reflect current capabilities of RTRP systems and PSPs, it does not reflect what ‘could be’ offered by studied entities
- Many closed loop systems also function as a PSP; we analyzed their capabilities through each lens, as appropriate

DEFINITIONS

RTRP System	Payment Services Provider' (PSP)
A payment scheme, platform, and services that facilitates the transfer of real time retail payments (RTRP) within a closed or open loop network of end users	A provider that focuses on delivering a specific set of services to support MSME payment-related needs. These services typically have a payment component that leverages open loop or closed loop RTRP system

RTRP SYSTEMS AND PSPS STUDIED

We studied the following 17 RTRP systems and PSPs. Some we have classified as ‘RTRP system’, others as ‘Payment Service Providers’, a few as both

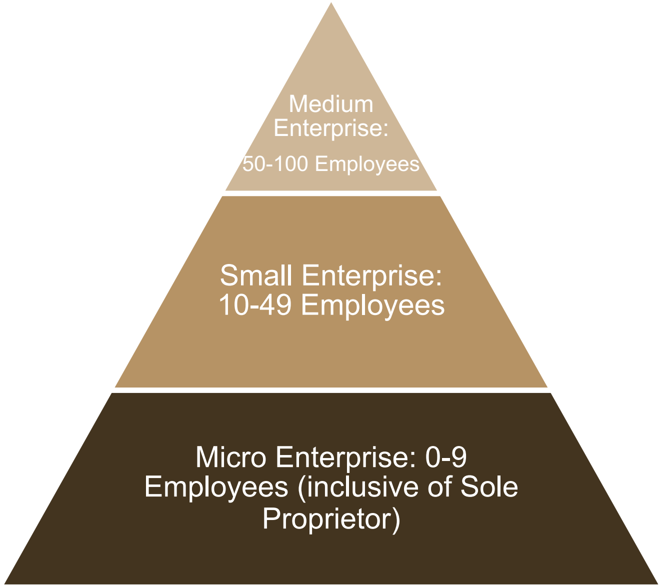
Entity	RTRP System?	PSP?
Pix	Y, Open Loop	
UK Faster Payments Scheme	Y, Open Loop	
Zelle	Y, Open Loop	
Easypaisa		Y
Flutterwave		Y
Higo		Y
Instamojo		Y
MFS Africa/ Beyonic		Y

Entity	RTRP System?	PSP?
Payoneer		Y
Veem		Y
Wise (formerly TransferWise)		Y
AliPay	Y, Closed Loop	Y
WeChat Pay	Y, Closed Loop	Y
PayPal	Y, Closed Loop	Y
Square	Y, Closed Loop	Y
M-Pesa	Y, Closed Loop	Y
Venmo	Y, Closed Loop	Y

MSME SEGMENTS AND THEIR PAYMENTS NEEDS

MICRO SMALL AND MEDIUM ENTERPRISES REPRESENT IMPORTANT SEGMENTS IN EMERGING ECONOMIES

- Estimates from 2019 show 196 million formal Micro, Small, and Medium Enterprises (MSMEs) in emerging markets; informal enterprises likely push this figure much higher
- The most common way to classify an MSME is by number of employees
  - Definitions for MSMEs vary but within emerging markets the upper limit is ~ 100 employees
- MSMEs are significant sources of employment; in low and lower-middle income countries MSMEs contribute an estimated 81% and 91% of jobs respectively
- Within emerging markets, Micro Enterprises account for 94% of MSMEs
- This section details the payments needs that are common across MSME segments and surface additional payments needs unique to each segment



Source: IFC, SME Finance Forum, Glenbrook Analysis

COMMON MSME PAYMENTS NEEDS

Payments needs that are common across all MSME segments include:

- **Enroll easily via remote onboarding:** ability to onboard to an account remotely, using as few keystrokes as possible
- **High systems availability and reliability:** ability to make payments reliably, 24/7/365, regardless of their geographic location
- **Reliable directory mechanism:** ability to ensure that the payer and payee addresses, are as intended
- **Access to basic transaction data:** ability to access transaction history for record keeping and operations
- **Accept payments from all relevant transaction accounts**: ability to accept payments from any end user, regardless of what institution that end user holds an account with
- **Assurance of payment confirmation:** ability to confirm that the payment is completed (from the end user perspective)
- **Make all necessary use cases:** ability to make all types of transactions considered necessary to support their business

Source: IFC, ITU, GSMA, Glenbrook Analysis

Source: IFC, ITU, GSMA, Glenbrook Analysis

A NOTE ON USE CASES

As mentioned, MSMEs also need to be able to make all types of transactions considered necessary to support their business. However, the range of necessary use cases expands as MSMEs grow in size

Eventually, MSMEs require a mix of consumer & business payments use cases

MSME

Consumer Payments

Business Payments

In-Bound Payments

Purchases
(remote and physical)

Bill Payment

Accounts Receivable

Out-Bound Payments

Purchase or Bill Payment
Refunds and Reversals

Purchases

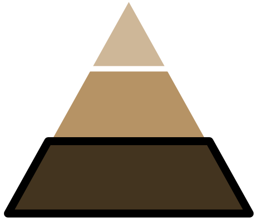
Bill Payment

Supplier Payments/
Accounts Payable

Tax & Other Government Payments

Source: IFC, ITU, GSMA, Glenbrook Analysis

PROFILE: MICRO ENTERPRISES



Micro Enterprises exhibit the following characteristics:

- Possibly an informal business
- Often do not have a formal bank account
- Predominant form factor to access financial services is a feature phone; sometimes this is a personal phone, sometimes this is a dedicated phone for business
- May be technologically averse and have difficulty with new technology
- Sensitive to liquidity and cash-flow
- Payments may sometimes look like personal payments (e.g., P2P funds transfers)

Additional payment needs of Micro Enterprises:

- **No or low-cost transactions:** transactions are equal to or lower than the perceived cost of cash
- **Immediate funds availability**: transaction funds are available to use, in real time
- **Accessible via pro-poor channels:** transactions can be initiated or received via USS (by a feature phone or smartphone)
- **Access to CICO agents:** a mechanism to support cash-in, cash-out must be readily available

As Micro Enterprises increase in size, their needs become more complex, sometimes blurring with Small Enterprise payments needs (p16)

Source: IFC, ITU, GSMA, Glenbrook Analysis

WOMEN-OWNED ENTERPRISE PAYMENT NEEDS

While global estimates vary, most place the share of women-owned MSMEs at about one-third of formal (registered) MSMEs. The true percentage of women-owned enterprises is likely far higher when considering informal enterprises

Women-owned MSMEs tend be Micro Enterprises. As such, women-owned digital payment needs mirror Micro Enterprise payments needs. However, some needs are more acute, including:

- **Enroll easily via remote onboarding:** women users may not be able to travel as far to get to a physical location to onboard, if required
- **No or low-cost transactions:** women users are likely to skew informal and may be less inclined to absorb payments fees
- **Immediate funds availability:** women tend to be more risk averse than men in adopting new digital financial services and need real-time funds transfer to help build trust in the system
- **Payment confirmation:** women tend to report less confidence in their ability to navigate technology than men, and as such, payments confirmation can be a helpful tool in providing assurance and building trust for female users
- **Accessible by pro-poor channels:** women are less likely to have access to and use mobile internet
- **Access to / support by CICO agents:** like payments confirmation, agents can be a helpful tool in providing assurance and building trust for female users

Source: Caribou Digital, IFC, USAID, SME Finance Forum, GSMA, World Bank, Glenbrook Analysis

PROFILE: SMALL ENTERPRISES

Small Enterprises exhibit the following unique characteristics:

- More formal business structure, established practices, and higher technological sophistication
- Likely to have a bank account
- Likely to have a dedicated business transaction account
- More likely to value services that integrate with transactional services and credit facilities
- More likely to have access to ecommerce as a sales channel

Additional payments needs of Small Enterprises:

- **Remote commerce support:** can connect into major marketplaces with little to no effort and can support remote ordering without proprietary capabilities
- **Access to transaction data for business decisions**: multiple types of transaction and customer data are available for analysis and synthesis to extract revenue insights
- **Access to escrow services**: access to intermediary escrow services to support payment with delayed delivery of goods
- **Ability to accept all consumer-preferred payment methods**: can accept debit card payments, credit push payments, credit card payments, cash, etc.
- **Ability to electronically deliver / send invoices**: can send and receive e-invoices to support funds reconciliation and invoice management

Source: IFC, ITU, GSMA, Glenbrook Analysis

PROFILE: MEDIUM ENTERPRISES

Medium Enterprises exhibit the following unique characteristics:

- Formal, established practices, and an aptitude to leverage latest technologies
- Majority have a bank account, sometimes multiple
- Likely to have a formal merchant transaction account
- Very likely to leverage value added services that integrate with transactional services and credit facilities

Payments needs of Medium Enterprises include Small Enterprises needs plus:

- **Back end payments integration**: transaction data integrates with other merchant bank-end operations tools (e.g. accounting program)

Source: IFC, ITU, GSMA, Glenbrook Analysis

SUMMARY OF MSME PAYMENTS NEEDS

The following summarizes MSME payments needs, in no particular order

MSME Payments Need	MSME Segment			Acute for women-owned MSMEs?
	Micro Enterprise	Small Enterprise	Medium Enterprise	
Enroll easily via remote onboarding	🏪	🏪	🏪	♀
High systems availability and reliability	🏪	🏪	🏪	
Reliable directory mechanism	🏪	🏪	🏪	
Access to basic transaction data	🏪	🏪	🏪	
Accept payments from all relevant transaction accounts	🏪	🏪	🏪	
Make all necessary use cases	🏪	🏪	🏪	
Payment confirmation	🏪	🏪	🏪	♀

MSME Payments Need	MSME Segment			Acute for women-owned MSMEs?
	Micro Enterprise	Small Enterprise	Medium Enterprise	
No or low cost transactions	🏪			♀
Immediate funds availability	🏪			♀
Accessible by pro-poor channels	🏪			♀
Access to CICO agents	🏪			♀
Access to transaction data for business decisions	🏪	🏪	🏪	
Remote commerce support	🏪	🏪	🏪	
Access to escrow services		🏪	🏪	
Ability to accept all consumer-preferred payment methods		🏪	🏪	
Ability to electronically deliver / send invoices		🏪	🏪	
Back-end payments integration			🏪	

Source: IFC, ITU, GSMA, Glenbrook Analysis

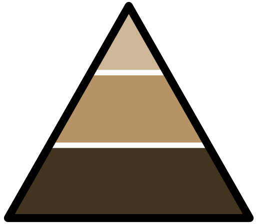
HOW RTRP SYSTEMS AND PSPS ADDRESS MSME PAYMENTS NEEDS

SUMMARY OF FINDINGS

1. RTRP systems often enable capabilities necessary for modern real time retail funds transfer for use by MSMEs, providing the advantages of speed, 24/7 availability, access by multiple users, and payment confirmation. Serendipitously, a number of these are common MSME payments needs
2. Given that RTRP systems tend to focus on the transfer of value from point A to B, the provision and availability of value added services has largely been left to DFSPs and/or PSPs. As such, PSPs address the needs of Small and Medium Enterprises that are more mature and tech savvy, where they can sell value-added services for a premium. However, this dynamic may be changing, as we see RTRP systems increasingly adding value-added services as embedded capabilities
3. RTRP systems and PSPs occasionally or rarely address the unique payments needs of Micro Enterprises. These needs include some that are more acute for women-owned MSMEs. We don't anticipate this changing organically given current market approaches
4. RTRP systems and PSPs do not enable all these capabilities by themselves. They need to rely on the support of ecosystem participants to fulfill most MSME needs

Source: Glenbrook Analysis

1. MODERN RTRP SYSTEMS TYPICALLY ADDRESS SOME COMMON MSME NEEDS



- RTRP systems and PSPs typically build capabilities that encompass features and functionality necessary to successfully facilitate RTRP funds transfers
- Many of these needs are common across MSME segments and a few are acute for women-owned MSMEs

MSME Payment Needs	**MSME Segment(s)**					
	Micro Enterprise	**Small Enterprise**	**Medium Enterprise**	**Acute for Women-Owned MSMEs?**	**Addressed by RTRP systems?**	**Addressed by Payment Service Providers?**
High systems availability and reliability						
Reliable directory mechanism						
Access to basic transaction data						
Payment confirmation				♀		
Immediate funds availability				♀		

Often addressed Occasionally addressed Rarely, if at all, addressed

Source: Glenbrook Analysis, further detail in the appendix

2. PSPS TEND TO FOCUS ON CAPABILITIES SUITABLE FOR SMALL AND MEDIUM ENTERPRISES

- PSPs often focus on value added services needed by Small and Medium Enterprises that typically require the use of smart phones and/or online capabilities; RTRP systems rarely address these needs
  - Most open RTRP systems depend on other ecosystem participants to provide such services, however closed loop RTRP systems frequently double as a PSP, sometimes directly addressing these needs
  - *We observe systems outside the scope of study that are increasingly providing remote commerce capabilities

MSME Payment Needs	MSME Segment(s)					
	Micro Enterprise	**Small Enterprise**	**Medium Enterprise**	**Acute for Women-Owned MSMEs?**	**Addressed by Payment Systems?**	**Addressed by Payment Service Providers?**
Access to transaction data for business decisions						
Remote commerce support*						
Access to escrow services						
Ability to accept all consumer-preferred payment methods						
Ability to send e-invoices						
Back-end payments integration						

Often addressed Occasionally addressed Rarely, if at all, addressed

Source: Glenbrook Analysis, further detail in the appendix

THICKER RTRP SYSTEMS ARE TRENDING

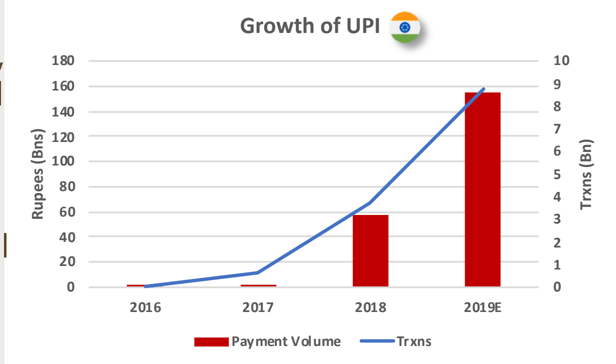
There is a clear movement towards thicker platforms to enable utilization, digital transformation and financial inclusion

Two major trends observed within RTRP platforms:

1. New platforms are launching with **embedded capabilities** to handle the exchange of remittance data or with directories to map aliases (Australia, Peru)
2. Existing platforms are **expanding core capabilities**, adding directory services or embedding overlay services directly into the platform within 2-5 years post launch (Singapore, EU)

Additionally, some schemes with initially low uptake, are attempting to make the payment schemes more attractive by enhancing the end-user experience directly.

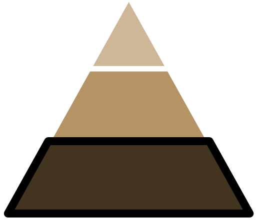
- **India**—Initially launched real time payments (IMPS) in 2010, but adoption was anemic until the platform was modified to include mobile-based payments and subsequently a mobile interface (BhiM) that all participants can embed within their systems



- **Mexico**—Slower than expected growth of SPEI since launch in 2004 has led the central bank to develop a new QR payment interface (CoDi) to solve for specific use cases, namely providing merchants a no-cost acceptance solution

Source: Glenbrook Analysis, further detail in the appendix

3. MICRO ENTERPRISE PAYMENT NEEDS ARE OCCASIONALLY OR RARELY ADDRESSED



- Many needs relevant for Micro Enterprises are not often addressed by RTRP systems nor PSPs
  - These needs include many of those that are more acute for women-owned MSME
- We observe that RTRP systems and PSPs largely position new offerings with intent to be better than incumbent, status quo offerings rather than to align with best practices to increase financial inclusion. Open loop, central bank-led schemes appear to be the exception, likely because the central bank can mandate approaches. This is particularly true with MSME need of 'no to low cost transactions'

MSME Payment Needs	MSME Segment(s)					
	Micro Enterprise	Small Enterprise	Medium Enterprise	Acute for Women-Owned MSMEs?	Addressed by Payment Systems?	Addressed by Payment Service Providers?
Accept payments from all relevant transaction accounts						
Make all necessary use cases						
No or low-cost transactions				♀		
Accessible by pro-poor channels				♀		
Access to CICO agents				♀		

Often addressed Occasionally addressed Rarely, if at all, addressed

Source: Glenbrook Analysis, further detail in the appendix

4. FULFILLING MSME NEEDS REQUIRES ECOSYSTEM COMMITMENT

Ecosystem support* is required to fulfill any MSME need. Said another way, RTRP systems and PSPs may design to address MSME needs but often cannot consider these needs addressed without the support of other market actors. For example,

- RTRP systems may provide **high systems availability and reliability** (24/7/365, 99.999% uptime), but DFSPs or connecting infrastructures may or may not be able to meet this standard
- RTRP systems may provide **low cost transactions** to DFSP participants, hoping that those cost savings are passed on to end users, but DFSPs may or may not choose to mark up transaction fees
- **Access to transaction data (basic and for business decisioning)** requires support by DFSPs

Some MSME payment needs may be completely outside of the control of the RTRP system and/or PSP where they are dependent on the regulatory environment and DFSPs:

- The ability to **enroll easily via remote onboarding**, is dependent on country Know Your Customer (KYC) requirements, with end user engagement controlled by DFSPs

* Ecosystem support refers to regulations, infrastructures, products and services developed and supported by DFSPs and/or other payment system participants

Source: Glenbrook Analysis, further detail in the appendix

SUMMARY: DEGREE TO WHICH MSME NEEDS ARE MET BY RTRP SYSTEMS AND PSPS

Some MSME needs are often addressed, other MSME needs are occasionally addressed, and a few are rarely, if at all, addressed

MSME payments need	Addressed by RTRP systems?	Addressed by Payment Service Providers?
Enroll easily via remote onboarding	N/A - Dependent on regulatory environment	
High systems availability and reliability		
Reliable directory mechanism		
Access to basic transaction data		
Accept payments from all relevant transaction accounts		
Make all necessary use cases		
Payments confirmation		

MSME payments need	Addressed by RTRP systems?	Addressed by Payment Service Providers?
No or low cost transactions		
Immediate funds availability		
Accessible by pro-poor channels		
Access to / support by CICO agents		
Access to transaction data for business decisions		
Remote commerce support		
Access to escrow services		
Ability to accept all consumer-preferred payment methods		
Ability to send e-invoices		
Back-end payments integration		

Source: Glenbrook Analysis

MSME CROSS-BORDER PAYMENT CONSIDERATIONS

SOME MSME CROSS-BORDER PAYMENTS NEEDS MIRROR MSME DOMESTIC PAYMENT NEEDS

As with domestic payments, the availability of modern systems is bringing about improvements in cross-border payments. However, newer technology alone cannot resolve all MSME business needs. Below we highlight the subset of MSME payment needs that are particularly challenging in the cross-border context along with an explanation of why the need is important (in no particular order)

Reliable directory mechanism	Ensuring accuracy of payee information is even more important when sending funds across border to a different legal jurisdiction. Additionally, the information itself can be a challenge as different country codes, DFSP routing indicators, etc. may be needed
Make all necessary use cases	Although the payment itself is a credit transfer, the availability to complete a request for payment or exchange remittance information may not be available on a XB basis
No or low-cost transactions	Cross-border transfers are more complicated than domestic payments, and are often priced as value added services or used as profit centers for DFSPs. This need extends into new fee types that may exist for cross-border payments
Access to escrow services	Escrow can be even more valuable in providing the needed confidence to ship the goods across borders before receiving payment
Ability to accept all consumer- preferred payment methods	The mix of relevant preferred payment methods varies widely by country and newer RTRP systems may not yet be widely used by or available to MSMEs
Ability to electronically deliver / send invoices	Invoice detail can be very important for some XB transactions as it provides required detail information for customs as well as revenue authorities

Source: Glenbrook Analysis

OTHER MSME CROSS-BORDER PAYMENTS NEEDS ARE UNIQUE

MSMEs that conduct cross-border transactions to countries with different currencies face additional, unique challenges:

- It can be a challenge to distinguish between the cost of a cross-border payment and the quality/magnitude of the foreign exchange rate
- Most invoice payments are for a fixed amount of foreign currency – this type of transfer is more challenging (and expensive) than a traditional transfer where the value in foreign exchange may not be known in advance. Payments in foreign currency are generally 1) fixed amount at sending end to variable amount at receiving end or 2) variable amount at receiving end to fixed amount at receiving end
- Additionally, foreign exchange contracts are typically done two days in advance (forward contracts, not spot) and this creates foreign exchange risk for the the provider (which is often priced into the rate to compensate). The speed of real time payments should promote improvements here

As a result, MSMEs that conduct cross-border transactions across countries with different currencies require:

- **Affordable foreign exchange rates:** MSMEs are price conscious and will likely compare the cost of cross-border payments to the cost of domestic payments. MSMEs therefore require reasonably priced foreign exchange and prefer no additional fees
- **Transparent pricing:** MSMEs need to know the costs they or their buyers will incur prior to starting payment initiation

MSMEs that conduct cross-border transactions may need to support tax reporting and collection in other countries. This introduces an additional unique payment need – **payment and/or invoice data and support for tax reporting**, where country tax reporting needs are understood and necessary payment data and support are provided to help ensure tax compliance

Source: Glenbrook Analysis

UNIQUE PAYMENTS NEEDS OF CROSS-BORDER MSMES ARE NOT YET WIDELY ADDRESSED

- Most RTRP payment systems start as domestic systems so cross-border capabilities are often ”bolted” on as bilateral connections. The user experience is rarely smooth. In the RTRP systems studied here, only three appear to have cross-border capabilities. Meanwhile, eight of the PSPs studied offer some cross-border capabilities. Below we outline our findings relative to these providers
  - Among the RTRP systems that support cross-border payments, we see promotion of ‘more affordable’ foreign exchange rates relative to traditional bank remittance alternatives, as well as transparent pricing at payments initiation. However, in many instances these rates may not be ‘affordable’, particularly for Micro Enterprises
  - Among the PSPs that support cross-border payments, a few provide foreign exchange rates that are markedly more affordable than traditional bank remittance alternatives. While this currently varies by provider, it appears to be a trend. However, like RTRP systems, in many instances these rates are still likely not ‘affordable’, particularly for Micro Enterprises. Price transparency is more common with PSPs, as some quote rates directly on sites
- Some PSPs provide payments and invoicing data necessary for taxes; a few offer a formal tax service offering. RTRP systems provide some but not all of the necessary data for taxes and no formal tax service offering

MSME payments need	**Addressed by RTRP systems?**	**Addressed by Payment Service Providers?**
Affordable foreign exchange		
Transparent cross-border pricing		
Payment and invoice data for tax reporting		

IMPLICATIONS AND RECOMMENDATIONS FOR THE LEVEL ONE PROJECT

ENHANCE L1P PRINCIPLES TO EXPLICITLY ADDRESS ALL MICRO ENTERPRISE NEEDS

Within emerging markets, Micro Enterprises account for 94% of MSMEs, many of which are women-owned. As such, we recommend a continued focus on the payments needs of this group as a critical success factor to achieve financial inclusion and scale

- Many of the Micro Enterprise payments needs are already explicitly called out by the L1P principles. In these instances, we suggest L1P continues to champion for existing principles but also acknowledge the expansive remit of meeting the payments needs of Micro, women-owned Enterprises
- Some of these needs are not as explicitly acknowledged by L1P principles, though are often assumed or implied. In these instances, we suggest elevating these assumptions to principles

We recommend reflecting these updates in the next iteration of the L1P Guide

Micro Enterprise Payments Need	L1P Principle Action
Enroll easily via remote onboarding	**Elevate to principle**
High systems availability and reliability	**Elevate to principle**
Reliable directory mechanism	Continue to champion
Access to transaction data for operations	**Elevate to principle**
Accept payments from all relevant transaction accounts	Continue to champion
Make all necessary use cases	Continue to champion
Payments confirmation	**Elevate to principle**
No or low cost transactions	Continue to champion
Immediate funds availability	Continue to champion
Accessible by pro-poor channels	**Elevate to principle**
Access to CICO agents	Continue to champion

Source: Glenbrook Analysis

ENSURE MSME NEEDS ARE REFLECTED IN RTRP SYSTEM DESIGN AND IMPLEMENTATION

In instances where the Level One Project may support an RTRP implementation, we suggest permeating MSME needs (Micro Enterprises in particular) into RTRP system design and implementation by

- Reflecting the payments needs into RTRP objectives and design principles (e.g. low to no end user fees)
- Drafting business requirements documents and RFPs to include unique payments needs, if applicable (e.g. ability to enable USSD payer and payee sessions)
  - This will be particularly important for cross-border needs which historically are 'bolted on' at a later phase
- Reflecting the payments needs in scheme rules (e.g. bank and nonbank transaction account providers can be direct participants of the scheme).
  - This likely requires treatment throughout the scheme rules document to properly address varying roles and responsibilities

Source: Glenbrook Analysis

EXPLORE THE APPROPRIATENESS OF ADVOCATING FOR CERTAIN VALUE-ADDED SERVICES TO BE PROVIDED BY RTRP SYSTEMS

Payments needs that surface as MSMEs grow in size and income have historically been provided by PSPs, often for a premium. This need not be the case and we observe a trend towards thicker RTRP systems. We believe that some payments needs may be well suited for the RTRP systems to address instead, as a utility, in digitally developed markets.

In particular, we suggest L1P explore how best to support the following capabilities aligned to the growth of Micro Enterprises:

1. **Access to transaction data for business decisions:** multiple types of transaction and customer data are available for analysis and synthesis to extract revenue insights
2. **Remote commerce support:** can connect into major marketplaces with little to no effort and can support remote ordering without proprietary capabilities

To better understand the appropriateness of having RTRP systems provide these services on a utility basis, we suggest the following research scope of work*. For each need

- Conduct desk and qualitative research to better understand market examples of these innovations
- Flesh out the business requirements to successfully achieve each need
- Create an archetype for a solution that reflects the business requirements and maintains alignment with other L1P principles

Source: Glenbrook Analysis

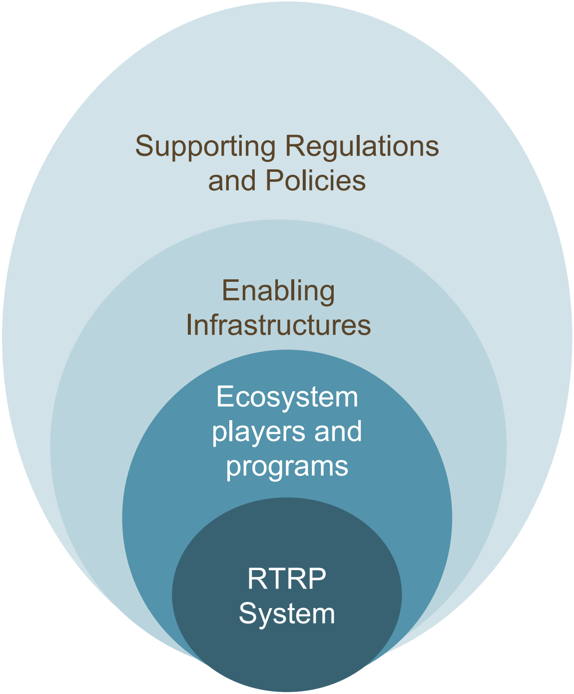
*Glenbrook has ideas on how to focus this work

TAKE AN ECOSYSTEM APPROACH TO INVESTMENTS TO BEST MEET MSME NEEDS

Some MSME payments needs sit outside the scope of RTRP system design or require ecosystem participation to actualize. As such, we recommend the Level One Project continues to take an ecosystem approach to investments, where considerations include

- Supporting regulations and policies (i.e. tiered KYC with no ID for the lowest tier to support ***enroll easily via remote onboarding***)
- Enabling infrastructures (i.e. expanded ICT network coverage to support ***high systems availability and reliability***)
- Ecosystem players and programs (i.e. create a thriving and competitive DFSP marketplace to ensure **no to low cost transactions**)

This is consistent with the 'building blocks' of FSP's 'Theory of Change'



Source: Glenbrook Analysis

APPENDIX

APPENDIX: DETAIL ON THE METHODOLOGY

MSME COUNTRY DEFINITIONS

Country	MSME Definitions (number of employees)					
	Micro		Small		Medium	
	lower	upper	lower	upper	lower	upper
Afghanistan	1	5	6	20	21	100
Angola	1	9	10	19	20	
Bhutan	1	4	5	19	20	99
Bolivia	1	4	5	14	15	49
Burkina Faso	0	10	10	29	30	99
Burundi	1	25	26	50	51	250
Cabo Verde	0	5	6	10	11	20
Cambodia	1	10	11	50	51	100
Cameroon	0	6	6	20	21	100
Egypt, Arab Rep.	1	4	5	49	50	99
El Salvador	0	11	11	50	51	100
Eswatini	0	3	4	10	11	50
Ethiopia	0	5	6	30	31	100
Gambia, The			0	5	5	
Georgia			0	50	50	249
Ghana	1	9	10	30	31	100
Guinea	1	3	4	60	4	60
Haiti	0	10	10	49	50	250
Indonesia	1	4	5	19	20	99
Kenya	1	9	10	49	50	99
Kosovo	1	9	10	49	50	249
Lao PDR			0	19	20	99
Lesotho	1	4	5	9	10	49
Liberia	0	3	4	20	21	50
Madagascar	0	10				199
Malawi	1	4	5	20	21	100
Mali	0	10	10	50	51	200
Moldova			0	50		249
Mongolia	0	9	0	19		49
Morocco	1	9	10	49	50	199
Mozambique			1	9	10	99
Nepal	0	5	0	20		
Nicaragua	1	3	4	30	31	50
Niger	1	3	4	10	11	50
Nigeria	1	9	10	49	50	199
Pakistan	1	10	11	50	51	250
Philippines	1	9	10	99	100	199
Rwanda	1	3	4	30	31	100
Solomon Islands	1	19	10	49	49	
South Sudan	1	4	5	9	10	49
Tajikistan	0	1	1	30	30	200
Tanzania	1	4	5	49	50	99
Timor-Leste	0	9	10	50	51	100
Tunisia	0	6	6	49	50	199
Uganda	1	9	10	49	50	99
Ukraine	0	11	11	50	50	250
Vanuatu	1	5	6	20	20	50
West Bank and Gaza	0	6	6	14	15	50
Yemen, Rep.	1	9	10	99	100	499
Zambia	0	11	11	50	51	100

Source: SME Finance Forum

RTRP SYSTEM AND PSP CAPABILITIES AND ATTRIBUTES REVIEWED

- Purpose-built for MSMEs
- Description
- Geographic focus
- Impetus for scheme development
- How the scheme works
- Target MSMEs (by size and/or industry)
- Key use cases
- Domestic vs. cross-border payments
- Types of payments/push vs. pull
- Open loop vs. closed loop
- Payment rails
- Support for request to pay
- Value limits
- Type of user account
- Allowed payment service providers
- Method of payment initiation
- Transaction value limits
- Interoperability
- Costs to payer/receivers
- Ability of service providers to charge fees
- Costs to participants
- Ancillary MSME services
- Identity requirements
- Addressing
- Governance/participation model
- Volume or other results metrics
- Profitability status
- Observations/considerations for Level One Project principles

RTRP SYSTEM AND PSPS REVIEWED

Country/ Region	RTRP system/ Scheme	Open vs. Closed Loop	Purpose-Built for MSMEs/ SMEs?	Push vs. Pull Payments	Able to Send Funds to Other Schemes?	Governance Model	User Access Mechanisms	MSME/SME Services
Africa/ Other	**M-Pesa**	Closed loop	No, started with P2P	Push	Yes – to bank accounts, Western Union	Commercial led (Vodafone)	Smartphone, USSD	Business App Merchant acceptance Payroll
Brazil	**Pix**	Open loop	No	Push/Pull	No	Central Bank led	Bank account mobile app, QR code, ATMs with open banking capabilities	None currently
China	**AliPay**	Closed loop	Yes, now multiple use cases	Push	Yes – to personal or third party local bank account via Alipay app	Commercial led (Ant Financial)	Mobile, web, QR code	eCommerce platform, Escrow Services, Seller Accreditation, Lending
China	**WeChat Pay**	Closed loop	No, began as personal lifestyle app	Push	Yes – to personal or third party local bank account via WeChat Pay app	Commercial led (Tencent)	Mobile, web, QR code	eCommerce platform, promotional content,

Note: Closed Loop Systems offer a transaction account within the scheme; with Open Loop Systems the transaction account is outside of the scheme

RTRP SYSTEM AND PSPS REVIEWED

Country/ Region	RTRP system/ Scheme	Open vs. Closed Loop	Purpose-Built for MSMEs/ SMEs?	Push vs. Pull Payments	Able to Send Funds to Other Schemes?	Governance Model	User Access Mechanisms	MSME/SME Services
UK	**Faster Payments Scheme**	Open loop	No	Push	No	Association led	Via bank mobile app, bill payment app, telephone app, in branch	None currently
US	**Venmo**	Closed loop	No, P2P first, then SME	Push	To same name bank account	Commercial led	Mobile, web, QR code	Purchase and sales of goods and services
US	**Zelle**	Open loop	No, P2P first, then SME	Push	No	Commercial led	Bank app or bill payment service, smartphone app, or web	SME payments B2C disbursements
US	**PayPal**	Closed Loop	No, P2P first, then SME	Push	To same name bank account; Can initiate Zoom cross-border payments	Commercial led	Smartphone, web, QR code	Merchant acceptance Send invoices

Note: Closed Loop Systems offer a transaction account within the scheme; with Open Loop Systems the transaction account is outside of the scheme

RTRP SYSTEM AND PSPS REVIEWED

Country/ Region	Payments Facilitator	App Based?	Purpose-Built for MSMEs/ SMEs?	Push vs. Pull Payments	Type of Payments	Governance Model	User Access Mechanisms	MSME/SME Services
Africa	**MFS Africa/ Beyonic**	Yes	Yes	Push	Pay: Mobile money Be paid: Mobile money, Visa	Commercial led (MFS Africa)	Smartphone, USSD, web	MFFS Africa Hub, Cross-border disbursements/ payments, merchant marketplaces, supplier payments
Africa	**Flutterwave**	Yes	Yes	Push	Be paid: card, M-Pesa, bank transfer, Visa QR, Flutterwave Barter, Kwikmoney, PayAttitude	Commercial led	Smartphone, web	Online store, cross-border payments
India	**Instamojo**	Yes	Yes	Push	Be paid: “100+ payment methods”; bank transfer, cards, pay later, monthly installments	Commercial led	Smartphone, web	Online store, request payment, online payments (receive payments)

RTRP SYSTEM AND PSPS REVIEWED

Country/ Region	Payments Facilitator	App Based?	Purpose-Built for MSMEs/ SMEs?	Push vs. Pull Payments	Type of Payments	Governance Model	User Access Mechanisms	MSME/SME Services
Mexico/ Latin America	**Higo**	Yes	Yes	Push	Bank transfers	Commercial led	Web smartphone	Centralized invoicing, B2B tax information, planned: lending, cash flow dashboards
Pakistan	**Easypaisa**	Yes	Yes	Push	Mobile transfers, bill payment and bank transfers	Commercial led	Smartphone, USSD	Online pmt gateway, API gateway, cash collection, supplier payments, business and salary payments
US, EU, Other	**Veem**	Yes	Yes	Push/Pull	Pay and be paid: Bank transfers, checks (US)	Commercial led	Web, smartphone	Invoices, Business Payments, Reporting, Acctg Integrations
US, Canada, UK, Aus, Japan	**Square**	Yes	Yes	Push/Pull	Pay: Cash App, Debit Card Be paid: multiple payment types	Commercial led	Web, smartphone, QR code	Merchant acceptance, extensive SME ecosystem, checking and savings, loans

RTRP SYSTEM AND PSPS REVIEWED

Country/ Region	Payments Facilitator	App Based?	Purpose-Built for MSMEs/ SMEs?	Push vs. Pull Payments	Type of Payments	Governance Model	User Access Mechanisms	MSME/SME Services
Global	**Payoneer**	Yes	Yes	Push/Pull	Pay: Debit Card or xfer to bank account Be paid: Receive funds to Payoneer wallet or prepaid card	Commercial led	Smartphone, online	Invoicing, gig worker payments, currency conversion
Global	**Wise (formerly TransferWise)**	Yes	No, started with P2P	Push/Pull	Pay: bank transfer, card, wire transfer, Apple Pay, Google Pay Be paid: Depends on currency	Commercial led	Smartphone, online	Multi-currency account, obtain Iban without the bank account, invoicing, batch payments

APPENDIX: FURTHER ANALYSIS OF RTRP AND PSP CAPABILITIES

WHY RTRP SYSTEMS ARE EXPANDING CORE COMPETENCIES

We observe a trend in RTRP systems increasingly providing more enhanced capabilities and services ‘in the middle’. This ’thickening’ is likely a result of

- **Low cost, robust technology** is now available to support expanded services
- **Scale**, a critical success metric for RTRP systems, may be reached more quickly if the **end user experience** is strong and consistent, so RTRP systems are expanding their scope

DETAIL – HOW RTRP SYSTEMS AND PSPS ADDRESS MSME NEEDS, 1

MSME payments need	Findings
Enroll easily via remote onboarding	Dependent on regulatory environment and DFSPs
High systems availability and reliability	24/7/365 is a point of parity for modern RTRP systems and PSPs; however, access channels necessary to connect to payments systems require USSD and / or data connections, which are dependent on ICT infrastructure
Reliable directory mechanism	RTRP systems and PSPs often support mobile and/or email addressing; we see some support of aliases
Access to basic transaction data	Transaction data is often available through the end user's account
Accept payments from all relevant transaction accounts	Accept payments from all relevant transaction accounts is most innately achievably by open loop RTRP systems that connect multiple DFSP types. The current reality is that most open loop systems are still bank only systems; Closed loop RTRP systems only meet this need if they operate in a market where only one account type (the closed loop account) is preferred by most all end user; PSPs meet this need if they connect to open loop RTRP systems OR if they connect to multiple RTRP systems
Make all necessary use cases	The abundance of secondary use cases and unique requirements of each makes it difficult for RTRP systems and PSPs, alike, to successfully support MSMEs to make all necessary use cases; RTRP systems often support a broad set of MSME use cases (e.g.P2B, B2P, B2B, etc) for funds transfer. However, most RTRP systems (open and closed loop) do not provide supporting features/functions that are required for MSMEs to execute secondary use cases (e.g. invoice delivery and reconciliation for P2B bill payments; PSPs tend to support a more narrow set of MSME secondary use cases (with necessary features/functions)
Payments confirmation	Payments are often immediately confirmed with an SMS text; a delayed confirmation is often available through the end user's account; we also see dashboards (e.g., cloud based) where a sender or receiver can confirm a transaction though this is not user-friendly on feature phones

DETAIL – HOW RTRP SYSTEMS AND PSPS ADDRESS MSME NEEDS, 2

MSME payments need	Findings
No or low-cost transactions	No cost or low-cost transactions (to end users) in RTRP systems varies by use case; It appears most commonly for the P2P use case; it is sometimes extended to other use cases, though we see ‘receiver pays’ approaches to pricing for MSME use cases perpetuated into RTRP systems, both open and closed; In instances where we see no or low cost transactions extended to some or all MSME use cases, we observe RTRP systems have intentions to scale (open loop systems), goals of market dominance (closed loop, commercial led RTRP systems), and/or an aim to increase financial inclusion (government mandated systems); PSPs tend to establish pricing at levels far above ‘near zero’, where pricing may be ‘lower than existing options’ as opposed to ‘free’
Immediate funds availability	Immediate funds availability is a point of parity for modern RTRP systems and PSPs
Accessible by pro-poor channels	USSD is sometimes addressed by RTRP systems and PSPs; it is unclear why this is not more commonplace – we consider the role of risk management or the goal of systems and PSPs to plan for a future that does not include feature phones or USSD as an access channel to DFS
Access to / support by CICO agents	Access to / support by CICO agents is often considered ‘outside of scope’ for open loop payment scheme design. As such open loop RTRP systems struggle to achieve reach when agents are not interoperable (by mandate or through bi/multi-lateral agreements) and/or DFSPs have not developed extensive agent networks on their own; Closed loop RTRP systems can sometimes meet this requirement, but that requires sizeable investments to develop their own extensive agent networks; access to agents is often considered irrelevant to PSPs given their target market
Access to transaction data for business decisions	To date, RTRP systems rarely offer this, particularly open loop systems—this is partly a result of messaging standards that did not accommodate such detail and partly an expectation that it is the responsibility or opportunity of financial institutions. With the increase of ISO20022, we may see this transform; closed loop systems are more likely, particularly those that play a dual role as a PSP; PSPs occasionally offer access to transaction data for business decisioning- sometimes providing a downloadable data file, rarely providing synthesized insights on their own

DETAIL – HOW RTRP SYSTEMS AND PSPS ADDRESS MSME NEEDS, 3

MSME payments need	Findings
Support of ecommerce	Open loop RTRP systems generally do not provide services to connect MSMEs to marketplaces, though some support ecommerce as a payments use case; closed loop RTRP system sometimes integrate ecommerce platforms into their systems (particularly if they have or are looking to have market dominance); PSPs regularly connect MSMEs to ecommerce platforms, providing technical and business support
Access to escrow services	We have not observed an open loop RTRP system that provides escrow services to MSMEs; closed loop RTRP system sometimes provide access to escrow services; PSPs sometimes provide MSMEs escrow services
Ability to accept all consumer-preferred payment methods	We have not observed RTRP systems providing access to multiple payment methods (e.g. debit, credit) as this is counter to their goal; PSPs sometimes play the role of a payments facilitator and provide MSMEs the ability to accept all consumer preferred payment methods
Ability to send e-invoices	Open loop RTRP systems typically do not provide e-invoices, however increasingly we are seeing Request to Pay functionality provide the necessary information to connect a payment to corresponding goods/services. Meanwhile, PSPs regularly provide robust invoicing capabilities
Back end payments integration	Closed loop RTRP systems and PSPs often offer back-end payment integration capabilities. Open loop RTRP systems rarely, if at all, offer integrations

DETAIL – HOW RTRP SYSTEMS AND PSPS ADDRESS WOMEN OWNED ENTERPRISE NEEDS

Payments needs that are felt more acutely by women-owned enterprises are inconsistently addressed:

- **No or low cost transactions, accessible by pro-poor channels, and access to / support by CICO** agents are occasionally or rarely addressed by RTRP systems and PSPs
- **Enroll easily via remote onboarding** is the responsibility of the DFSP
- **Payment confirmation** and **immediate funds availability** are more consistently addressed by RTRP systems and PSPs

MSME Payment Needs	Relevant MSME Segment(s)					
	Micro Enterprise	Small Enterprise	Medium Enterprise	Acute for Women-Owned MSMEs?	Addressed by Payment Systems?	Addressed by Payment Service Providers?
No or low cost transactions				♀		
Enroll easily via remote onboarding				♀		
Payment confirmation				♀		
Immediate funds availability				♀		
Accessible by pro-poor channels				♀		
Access to / support by CICO agents				♀		

Often addressed | Occasionally addressed | Rarely, if at all, addressed

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