B2B AND THE DFS ECOSYSTEM

ITU-T FOCUS GROUP ON DIGITAL FINANCIAL SERVICES

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B2B and the DFS Ecosystem

Focus Group Technical Report

FOREWORD

The International Telecommunication Union (ITU) is the United Nations specialized agency in the field of telecommunications, information and communication technologies (ICTs). The ITU Telecommunication Standardization Sector (ITU-T) is a permanent organ of ITU. ITU-T is responsible for studying technical, operating and tariff questions and issuing Recommendations on them with a view to standardizing telecommunications on a worldwide basis.

The procedures for establishment of focus groups are defined in Recommendation ITU-T A.7. TSAG set up the ITU-T Focus Group Digital Financial Services (FG DFS) at its meeting in June 2014. TSAG is the parent group of FG DFS.

Deliverables of focus groups can take the form of technical reports, specifications, etc., and aim to provide material for consideration by the parent group in its standardization activities. Deliverables of focus groups are not ITU-T Recommendations.

About this report

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Executive Summary

Business-to-business (B2B) payments are often thought of in terms of the large value transactions which occur between and among large enterprises. But, small businesses, even very small businesses, like large ones, have to pay their suppliers and collect from their business customers. The ability to make and receive these payments in a timely fashion is often a critical factor in the success of the small business: a shop unable to buy new inventory won't be able to sell much. The means to affect these transactions remotely without visiting the customer's location or enabling employees to handle purchasing are key to growing a small enterprise. The move toward eMoney also creates a digital transaction record which is key to establishing credit.

In this report, we examine the impact of electronic B2B payments on the development of the DFSs ecosystem in developing countries. We look at the requirements of businesses, at the benefits of using electronic payments, and the trends affecting this market. In a section called "Second Order Benefits", we look at how the use of electronic B2B payments may accelerate the adoption of eMoney and electronic payments in general. We conclude with recognizing some of the barriers to adoption of B2B payments, and outlining some considerations for policy makers.

1 What are B2B payments?

Steve is a shopkeeper in central Nairobi who operates largely in cash. Most of Steve's payments look the same: two people pass Kenyan shillings to each other. Though many of these transactions appear the same, Steve is actually making different types of payments all the time. When he buys goods for his shop, Steve is making B2B payments. When his customers buy those goods, they make customer-to-business (C2B) payments. If he sends some of the money he has earned to his family, he makes a person-to-person (P2P) payment.

The introduction of digital payment tools and services allow Steve (and others like him) to use payment technologies specifically designed for each of these use cases. The purpose of this report is to explore whether digital B2B payment tools and services can benefit the poor.

All businesses *buy from* other businesses, which means that all businesses make B2B payments. This is true for small bodegas in rural, sub-Saharan Africa, and large multinationals operating across the globe. Some businesses *sell to* other businesses (many sell only to consumers). That is why this report will focus on *both* sending and receiving B2B payments.

We hypothesize that widespread digital B2B payments could have second-order benefits that could strengthen the overall DFSs ecosystem. This report explores potential ecosystem-level benefits and concludes with suggestions for how policymakers can take advantage of the opportunities presented by new digital B2B payment tools and services.

In any B2B payment, there are two parties: a buyer, and a supplier. The buyer receives a good or service from the supplier in exchange for payment. The buyer may immediately use a good as an ingredient or part in goods it manufactures, or stock that good and resell it to a consumer or business customer.

The types of bulk payments relevant to this report include:

- supplier payments (payments from a business buyer to a business supplier);
- bill payments (payments from a business to a utility or other service provider on a regular cadence);
- salaries/payroll (payments to consumers as employees or subcontract labour).

The report will not focus on government payments (taxes, fees, fines), financial market transactions (investments, mergers, and acquisitions), or intra-company transactions (between subsidiaries and headquarters). Agricultural sector payments are also not addressed in this analysis, due to the fact that it is the focus of a different analysis for the ITU[1]. Also, e-commerce transactions are not a part of this report, as we are focused on poor people and the underbanked who are less likely to be purchasing online, either as consumers or businesses.

2 B2B payment requirements

Business transactions are fundamentally different than consumer transactions.

Consumer transactions are often anonymous, particularly at the retail point of sale – whereas businesses tend to have ongoing relationships with their suppliers and know them well.

Consumers usually pay immediately, whereas suppliers typically extend credit – in the form of payment terms – to their buyers (this is closely tied to the fact that they know them and do business with them on a regular basis). For example, a business buyer may have thirty days to pay for goods and services.

1 Refer to ITU Focus Group Digital Financial Services Report on "Impact of Agricultural Value Chains on Digital Liquidity."

Formal businesses typically get an invoice, whereas consumers may or may not receive a bill (when they do it is typically from a utility or other recurring service provider). Consumers pay one bill at a time, whereas businesses often aggregate payment for multiple invoices together in one transaction. As consumers we pay what we owe, businesses, on the other hand, often pay less than the invoice – sometimes they have a legitimate reason for doing so (the product received was the wrong size or colour, the quantity was less than expected, the scope of the project was reduced, etc.), other times they do it because they can.

This means that when a business sends a payment, they also send an explanation of what the payment is for. They send a list of invoices and the amount paid for each, along with some sort of rationale for any short pays. This explanation is called a "remittance" (not the same as a P2P remittance), and for manual forms of payment this remittance is delivered along with the cash or check.

Informal businesses may not furnish invoices, and may not have formal accounting methods, instead tracking obligations in hand written ledgers – or even keeping track of them in their minds. Successful entrepreneurs, regardless of how informal their business practices may be, have means of ensuring that they are paid what they are owed.

As a consumer in the developed world, the cost of payments is limited to the stamp used to mail a check, the monthly fee for a bank account, or an ATM fee to withdraw cash. In the developing world, most transactions are made via cash and the associated costs are indirect: Time queuing to pay bills; potential agent fees to receive cash; transport costs; and, of course, the risk of theft. Whether in the developed or the developing world, consumers do not typically associate cost with payments for their purchases. Yet businesses that sell to consumers are accustomed to paying to be paid – particularly if they accept credit cards. But even those that accept cash recognize the cost of handling cash, ensuring security from internal fraud, and external theft. A business buyer (the company that is paying) may have significant cost associated with making and receiving payments.

All businesses have similar requirements for B2B payments. This is true for a sole proprietorship in Peru, and the biggest stores in London. Companies may emphasize the importance of some features more than others, and the sophistication of the processes and tools used vary. However, all businesses require:

- **Control over timing of disbursements and collections:** Businesses need to manage their cash flow. They want to control the timing of funds going out as payments to suppliers and to employees as payroll. Also, ideally, they'd like to be able to predict when funds will arrive. Knowing when their customers will pay them enables them to manage their borrowing (or invest excess funds).
- **Security of payments:** Businesses need to feel secure and safe when making and receiving payments. They want to feel comfortable delegating responsibility to employees. They also want to know that they are protected from fraudsters outside their company. Cash may be convenient, but it is also expensive to secure. The relatively large size of B2B payments means that security measures appropriate for consumer payments may need to be augmented.
- **Data:** Businesses need to be able to track payments. They need to get payment data into their accounting 'system' (whether it is a manual ledger, a spreadsheet, accounting software, or an ERP system) so that they can close out obligations recorded in their receivables. They need to know who paid, what they paid for, and who still owes them money. The sooner they follow up on collections, the more likely they are to be paid. Data that enables tracking customer accounts is also key to recognizing the most valuable customers and attracting more like them. Similarly, expenses need to be allocated to the appropriate categories, projects, product lines, or locations so that businesses can understand the profitability of goods and services. Even tiny, informal businesses operating without digital tools have mechanisms for

tracking outstanding payments and often a nuanced understanding of the profitability of the goods and services they sell – even if it means relying on handwritten records or memory. Businesses seeking credit recognize the value of accurate and auditable records when it comes time to borrow funds.

- **Efficiency:** Most entrepreneurs start businesses because they are enthusiastic about the goods and services they provide – they are passionate about tutoring youth, providing medicine to their village at its first ever pharmacy, installing and maintaining electrical systems, etc. They are often much less enthusiastic about the administrative and financial management tasks associated with running a business. Thus, tools that make bookkeeping and invoicing easier and faster are much appreciated. Digitizing payments often means that the information associated with transactions is in a variety of different formats. Counter intuitively, this may be less efficient and more work for the accounting staff (or business owner herself) than manually tracking payments. Handling payment exceptions can also significantly increase administrative efforts and even interfere with efforts to streamline back office tasks.
- **Reasonable costs**: Businesses large and small are willing to pay for reliable, low-risk, efficient digital payments. But the direct (transaction fees) and indirect cost (processing, exception handling, converting digital value into cash) should be reasonable given the associated benefits.

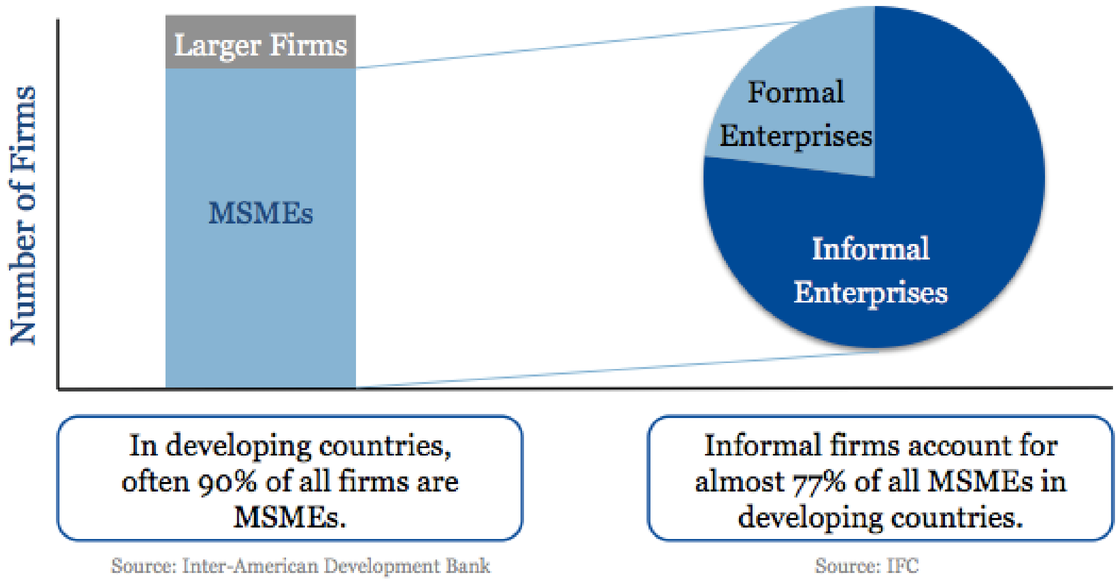
Some requirements may be more important for some businesses than others. A previous article for the ITU DFS Focus Group separated merchants and payment acceptors into nine categories. The smallest, M0, are small consumers transferring money to each other in a P2P fashion. The largest, M8, is the government. Each of these user categories has access to different technologies, different appetite for risk, and economic sensitivity.[2]

The size of a business has a large effect on digital B2B payment needs. Smaller businesses (those in the M1-M3 categories) tend to use "just pay" solutions with immediate payment and only informal credit. More complex features, including invoicing, VAT payments, and aggregated payments (for multiple invoice obligations at a time) may not be necessary. On the other hand, larger businesses – those in the M2, M3, M4, or M6 categories – may need solutions that cover VAT payments, invoicing, and aggregated payments. Larger companies also have a stronger propensity to invest in optimizing back office procedures and paying for payment solutions than informal companies.

In developing countries, the divide between formal and informal merchants will also have a large effect on the appropriate digital B2B payment tools and services. In both developed and developing countries, most businesses are small. Ninety-six percent of businesses in the United States have fewer than 10 employees.[3] Similarly, the vast majority of firms in developing countries are considered micro-, small-, and medium-sized enterprises.[4] In developing markets, an estimated 77 per cent of small and medium enterprises (SMEs) lack formal documentation.[5]

2 Enabling Merchant Payments Acceptance in the Digital Financial Ecosystems. ITU. February, 2016.
3 US Census, 2012 data.
4 Transforming Business Relationships: Inclusive Business in Latin America. Inter-American Development Bank. 2015.
5 Peer Stein, Oya Pinar Ardic, and Martin Hommes. Closing the Credit Gap for Formal and Informal Micro, Small, and Medium Enterprises. International Finance Corporation. 2013.

Figure 1 – Formal and informal enterprises



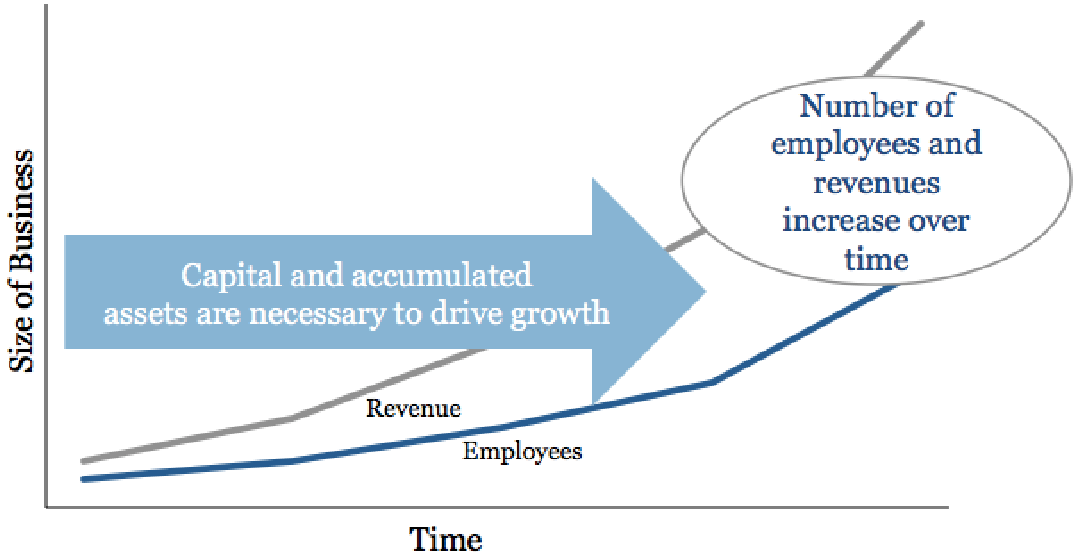
Informal businesses have different system requirements than formal merchants. Informal needs may align closely with those of M1 businesses. If structured correctly, however, digital B2B payment services could give informal owners an incentive to gain the necessary licenses to formalize their businesses.

B2B payment tools and services should align to the specific needs of companies at various stages of maturity – regardless of their location – as businesses grow and their back office procedures mature. Entrepreneurs manage their small companies in much the same manner as they manage their personal finances. As companies get larger, control becomes an important factor – the entrepreneur requires safeguards to feel comfortable delegating financial tasks to employees. Financing and credit become very important during growth phases, and often payment services are typically obtained from banks that are willing to extend credit to small businesses. Large enterprises often operate their back offices like factories, with emphasis on process efficiency and cost reduction. These businesses often have multiple banking relationships, and credit and payments are no longer intertwined.

As small companies begin to mature, they face certain bottlenecks: First, companies need capital for startup, then assets, then employees, then scale to support investment in assets, people, and processes. For example, a shop may begin by needing capital to buy goods for inventory. It will eventually need assets, such as a permanent home for the shop. If it gets large enough, the shop owner will need to hire employees to staff the store. Eventually, the company will want to scale to multiple locations, require a warehouse to store inventory, and perhaps a fleet of delivery trucks. These challenges are particularly profound in the developing world, where there are fewer options for small businesses. At each step in this growth trajectory, many businesses fail due to lack of capital for investment. Instead of obtaining assets, many informal owners remain without a physical store location. Others remain without employees, dependent on the time and skills of the owner and his or her family. The growth trajectory has slightly different characteristics for different industries, but all businesses require working capital to accumulate assets and scale.

Digital B2B payment tools and services may be able to help business owners overcome the challenges at each step toward maturity. The rest of this analysis focuses on the potential benefits of digital B2B payment services for small buyers and sellers.

Figure 2 – Business size and resource demand



We acknowledge that many businesses do not grow – they are large enough as is: Large enough to fund the lifestyle and aspirations of the entrepreneur. Their goal may be to earn enough to pay for their children's education, hire some assistance around the house, and save money to help care for aging parents. The business is optimized for lifestyle, rather than growth. Yet even these purposefully modest businesses can benefit from digital tools and associated increases in efficiency.

3 Benefits of B2B payments: Small buyers

Small buyers are one subset of businesses which could benefit from digitizing B2B payments. These small buyers include small shops owned by BoP. These shops often buy goods from wholesalers or distributors and then resell those goods. If the payment between the buyer and the seller could be digitized, the small buyer could:

- gain more control over the timing of disbursement, and obviate the need to be physically present to pay suppliers at the time of delivery;
- build a digital history of timely payment;
- hire and trust employees to manage day to day operations, and receive goods;
- manage relationships with key suppliers more strategically.

Disbursement timing:

Control over disbursement timing is one of the most essential elements of B2B payments. Suppliers want to get paid as soon as possible, while buyers want to keep control over the payment until they are sure that goods have been delivered.[6] Digital payments can help buyers maintain control. The digital payment provider Oxigen, for example, offers a tool where buyers can pay Oxigen, and the service will then pay suppliers on the due date.[7]

6 Carol Coye Benson. The Problem with B2B Payments. Payments Views. April, 2009.
7 Oxigen Wallet: https://www.oxigenwallet.com

Another example comes from the Democratic Republic of Congo, where cash is nearly the only option for making payments. When given the option to use eMoney, many small buyers reported that digital payments were more secure and saved time. Digital payments eliminated the need to travel with large amounts of cash. This saved the business owner time, and made the payments significantly less susceptible to theft.[8]

Another example comes from the company Copia Global, a distributor that supplies goods to shopkeepers in Kenya.[9] Copia can use mobile payments to offer shopkeepers a mobile "layaway" plan where they can pay for goods in small instalments. This allows shopkeepers to receive revenue from their own customers before paying the full amount to suppliers for goods.

Digital history:

Every time a buyer makes a payment, that payment can be recorded as a part of that person's or company's digital history. While cash leaves no digital trail, a digital history of B2B payments could allow small buyers to gain more business credibility – allowing them to obtain more favourable credit terms from strategic suppliers. Many SMEs lack the stature and bargaining power to negotiate good credit. As a result, their suppliers don't trust them to pay later, and will not offer them trade terms (pay in 30 days, for instance). As a result, many SMEs are forced to pay immediately without credit.[10]

Digital payment histories could help address this situation. By showing a history of successful transactions, SMEs can establish a willingness to pay on time that indicates creditworthiness. For example, the merchant services company Kopo lends money to merchants who have established digital payment histories.[11] The company builds a credit-scoring algorithm to measure each merchant's ability and willingness to pay back a loan. The company then offers "business cash advances" where a merchant can accept a bulk payment in exchange for a percentage of future revenue (until the advance, including a fee, is repaid). The size and terms of the advance are determined by the merchants' digital history of payments. A similar mechanism could be used to provide trade financing and other credit mechanisms using B2B payment histories for small businesses in many other places.

Employees:

Many entrepreneurs have problems delegating tasks to employees, especially tasks related to making payments and getting paid. As businesses grow, however, entrepreneurs need to hire on more employees. They may open multiple locations, and are unable to be in two places at once. Digital B2B payment services can give entrepreneurs the tools they need to delegate more tasks to employees, while maintaining transparency and security.

In this way, digital B2B payments could allow small buyers to hire and trust employees. Internal control features offered by business payment providers, including PINs and passwords, would make it easier for business owners to maintain security over payments. And, according to Rajpal Duggal of Oxigen, digital payments allow business owners to discover problems associated with payments in days instead of weeks. This would give business owners the opportunity to leave their stores and use their time more productively.

8 Mobile Money in the Democratic Republic of Congo: Market insights on consumer needs and opportunities in payments and financial services. GSMA. July, 2013.
9 Copia Global Website: http://www.copiaglobal.com/
10 Anne Marie Van Swinderen and Grace Mungai. Supply Chain Financing for SMEs. July, 2015.
11 Grow Cash Advance – 5 Frequently Asked Questions. Kopo Kopo. May, 2014.

Relationship management:

Buyers often source their goods from many different vendors. Digital tools would allow buyers to manage their relationships with each of their suppliers better, rather than rely on the sometimes-faulty recollection of business owners and employees. In the developed world there has been an explosion of small business-focused B2B purchasing tools that use eMoney for payment could bring that type of innovation to poor countries.

For example, the mobile payments platform Beyonic allows payers to store names, phone numbers, and payment histories inside of the platform.[12] This makes it easier for small buyers to track payments to suppliers and manage the overall relationships better by understanding fluctuations in purchasing over time. It also makes repeated payments easier by not forcing small buyers to re-enter information every time they want to make payment.

Over time, small businesses could use this information to make better business decisions. Data on the most frequent suppliers, cost comparisons between suppliers, evolving expenditure patterns, or other data stored in the system could enable enhanced analytics for small businesses. Strategic supplier and procurement management is a key element of business continuity and scalability.

Regulatory compliance:

Digital payment tools could also make it easier for small buyers to keep track of digital payments and create accurate accounting. This ability could enable easier regulatory compliance, including timely and accurate tax payments for small businesses.

Of course, this improved regulatory compliance is a benefit only for those companies that hope to remain compliant. Companies that want to evade taxes or other regulatory obligations would not see this as a benefit.

Example #1, Farmaenlace:

Rural Ecuadorians often have trouble accessing medical equipment and drugs. Many have to spend precious resources travelling to larger cities to visit hospitals. Recognizing this challenge, the drug distribution company Farmaenlace decided to expand into rural markets.

With help from the Inter-American Development Bank (IDB), Farmaenlace set up drug store franchises in rural areas of Ecuador. The franchise operators received training, advertising, and bonuses for sales. All constituents benefitted from the program: For the IDB, the project was part of an inclusive business initiative designed to help poor people; for Farmaenlace, the franchises sold up to 50 per cent more than the company’s own drug stores; for the franchise owners, monthly income went up by $2,400 after expenses.[13]

Digital B2B payment tools could help programs like this in a number of ways. The most basic is that B2B payments services could make payments between Farmaenlace and its franchises more transparent and secure. Each franchise could keep track of its inventory, payments, and sales patterns more effectively, and digital payments would be more secure than cash. It could also give the storeowners the flexibility needed to hire employees and delegate financial responsibilities, as discussed above.

The digital record of successful payments to Farmaenlace could also allow the franchise owners to access credit. The IDB or Farmaenlace could offer subsidized loans to qualifying franchises through

12 Based on an interview with with Dan Kleinbaum, COO of Beyonic: http://beyonic.com/
13 Transforming Business Relationships: Inclusive Business in Latin America. Inter-American Development Bank 2015.

digital B2B payment services. These services could enable more efficient disbursement, and the digital histories could be used to enable better credit decisions.

Example #2, Coca-Cola:

Consumer goods companies are investing heavily in emerging markets as a source of future business growth. In 2014, for example, Coca-Cola announced a $500 million investment in Egypt and Pakistan.[14] Coca-Cola products are often sold through local distributors to small shops throughout developing countries.

Digitizing the payments between the buyers and the distributors could result in significant benefits for the entire supply chain. Small business owners could allow employees to pay for products from Coca-Cola, even when the owner wasn't there. Not only would those payments be easier and more secure, the business owner would not be limited to cash on hand to fund inventory purchases. And, if a small buyer has a digital history of payments to the distributor, the distributor could feel more comfortable offering credit to the small buyers. Other financial service providers could also get involved, offering receivables financing, business cash advances, or more traditional loans to support business growth.

The histories could also be used for enhanced analytics. For example, Coca-Cola could enable accurate "preferred buyer" programs, offering incentives to companies that buy more.

Example #3, Tenoli:

Rural mom-and-pop stores in Mexico often carry products made by large, multinational companies like Pepsi and Nestlé. When small buyers purchase these products, they often pay distributors in cash. These cash payments create inefficiencies in the supply lines, and don't allow the small shops to capture all of the benefits of digital payments.

The distribution company Tenoli, based in Mexico, is trying to help by enabling large suppliers digitize to their supply chains, and better understand small buyers.[15] The company set up distribution sites, where large suppliers like Pepsi, Cemex, and Nestlé can deliver goods. Tenoli will then deliver the goods to the small buyers and collect the payments.

The data collected from the payments allow Tenoli to create consumer behaviour reports and bottom of the pyramid (BoP) economic profiles, which are then sold to suppliers. The reports give suppliers the ability to better understand small buyers, including mom-and-pop shops, in dangerous parts of Mexico. Large suppliers can then use the data to create loyalty programs that could benefit the small buyers. In the future, Tenoli could offer credit that would enable a more efficient supply chain. These greater efficiencies could also result in lower prices for the small buyers.

4 Benefits of B2B payments: Small suppliers

Digital B2B payments could also have benefits for small suppliers. Common examples of small suppliers in poor countries are independent contractors who supply labour to larger companies. Other examples could include artisanal manufacturers or small wholesalers. Benefits could include:

- faster payments, and, as a result, less cash flow anxiety;
- improved security as a result of avoiding cash;
- more customers by meeting the needs of buyers that prefer to pay digitally or for whom cash payment is inconvenient;

14 Shadia Nasralla. Coca-Cola invests in Egypt and Pakistan, sees big sales growth. Reuters. June, 2014.
15 Based on an interview with Thomas Ricolfi, co-founder of Tenoli: http://www.tenoli.org

- credit and digital history.

Faster payments:

Every supplier wants to get paid as fast as possible. The faster a supplier can be paid, the more working capital that supplier has on hand to conduct business. Digital money offers immediate transfers. If the supplier currently accepts checks, digital payments would eliminate the need to go to the bank and stand in line to cash the check. If the payments were in cash, digital tools would obviate the need to transport the cash between buyer and supplier.

Cash delivery usually takes three or four days, according to Oxigen. A banker's check or a draft would still take two or three days for suppliers to receive their payments. Payments through digital money can be made instantly.[16]

Improved security:

Faster payments also allow better security and cash management for the supplier. With wallet-to-wallet transactions, there is no chance that the payment will get lost in transit. With fewer opportunities for payments to get lost, digital payments could give suppliers the transparency and security needed to delegate payments to employees. Or, they could accept payments remotely, without the need to make the deliveries themselves.

Relationship management:

Much like buyers, digital B2B payment tools could help suppliers manage relationships better. The mobile payments firm Beyonic allows companies to both send and receive payments on the platform and save the digital history. This allows small suppliers to track incoming payments and better manage relationships with buyers.

This relationship management would also allow suppliers an easier time following up on unpaid invoices. When payments are made in cash, it is difficult to know which invoices have been paid and which are outstanding. A digital invoicing system would allow suppliers to know exactly when invoices are paid, and which invoices demand follow up.

Gain customers:

For small suppliers, the ability to accept payments digitally could actually increase the customer base. The company PayMate,[17] for example, touts its ability to help businesses accept payments from anywhere in India. This would allow a company to expand its geographic reach and gain more customers.

Another example comes from Copia Global.[18] The company is able to deliver "Right to the village. No address, no problem. Like FedEx, but better." The business, enabled by digital payments, offers delivery to urban locations within 48 hours and to rural locations within a week.

Establish digital history:

A digital history of payments could be a boon for small suppliers. For example, lenders could use digital histories to offer factoring and other types of receivables financing. That way, instead of waiting for the cash flow to arrive from small buyers, suppliers could sell the invoices to financial service providers in exchange for immediate cash.

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16 BASED ON AN INTERVIEW WITH RAJPAL DUGGAL, HEAD OF GROUP STRATEGY AND CORPORATE PLANNING AT OXIGEN.
17 PAYMATE: HTTP://WWW.GOPAYMATE.COM/.
18 COPIA GLOBAL: HTTP://WWW.COPIAGLOBAL.COM/.

Example #1, Visor:

Since January of 2014, Mexico has mandated that all companies must use state-approved e-invoicing services to create all of their invoices. These invoices are then collected and stored by the tax authority. The Economist described the law as "electronic arm-twisting," to force businesses and individuals to pay more taxes.[19] At the same time, the digital histories provided by these e-invoicing services could actually benefit small suppliers.

One example comes from Visor,[20] a Mexican company that provides credit-scoring services and supply-chain financing aimed at small suppliers. Visor's business model relies on large, multinational buyers that do business with many small suppliers. The large buyers give Visor access to their e-invoices, including payment information. Visor then uses that data to assign credit scores to all of the small suppliers. Financial institutions then partner with Visor to provide supply chain financing to the small suppliers.

Payments from large buyers could take days or weeks. For small, cash-strapped suppliers, that time can seem like an eternity. Instead of waiting, small suppliers could use that time to buy new goods or hire new employees. Supply chain financing could allow the small suppliers to get paid faster, enabling them to use that capital to expand their businesses. [21]

Example #2: 'Taobao villages" and Mr. Presta

Small suppliers have begun to tap into marketplaces like Alibaba, Amazon, and Flipkart to sell their goods online. In China, so-called "Taobao villages" have begun to emerge, where communities specialize in specific goods, like socks and shirts, to sell on the online shopping site Taobao. Since 2015, some of these villages have begun to specialize in B2B goods. The city of Zhuji, for example, produced 25.8 billion pairs of socks in 2014, or 30 per cent of the world's output. Many of these socks are produced by local suppliers, and then sourced to non-local Taobao sellers via the marketplace and funded with digital B2B payments.[22]

In Mexico and Argentina, the company Mr. Presta[23] is using data from MercadoLibre, an extremely popular online commerce marketplace in Latin America, to facilitate lending. Mr. Presta makes working capital loans to small merchants on MercadoLibre that enable small suppliers to expand their businesses. While this is not specifically a B2B loan, it shows how better payments data could enable financial service providers to offer more products and services to B2B companies.

Mr. Presta claims that the small businesses in Mexico and Argentina are currently underserved due to a lack of reliable information, an expensive analysis process, and expensive client acquisition channels. The company helps overcome these barriers by accessing reliable information (from MercadoLibre) and building software that allows them to make credit decisions and disbursements reliably and efficiently. Mr. Presta can then use that data to partner with financial institutions to extend credit into B2B buyers and sellers.[24]

19 Electronic Arm-Twisting. The Economist. May, 2014.
20 Visor Website: http://visor.io/
21 Based on an interview with Valeria Perez Rios, CCO Visor.
22 Research Report on China's Taobao Villages, Ali Research. 2015. http://i.aliresearch.com/img/20160126/20160126155201.pdf
23 Mr. Presta Website: http://www.mrpresta.com
24 Based on an interview with Carlos Rosso, cofounder of Mr Presta.

Example #3, Kopo Kopo:

In 2015, Kopo Kopo launched a "payments hub" product that allows companies to schedule and send multiple payments at once. The product was launched as a B2B payments solution for merchants to pay their suppliers.

One business to adopt the product was a courier company that had independent contractors around Nairobi. The company used "payments hub" as a salary payment system to send scheduled payments out to all their contractors at a set time. In this situation, the independent contractors acted as the suppliers of labour, while the courier company acted as the buyer.

The product also helped the courier company by simplifying payments to its contractors. It kept all contractors in a centralized system, and allowed the company to make payments faster and easier. Kopo Kopo charged the payers on a per-transaction basis, with an extra fee for integration into company back offices.

In Kenya, more people have digital money accounts than bank accounts. The "payments hub" product helped the independent contractors by paying them immediately, whether or not they had a bank account. It was also more secure than cash payments and faster than payment by check.

5 Counter examples

Although there are many benefits to making and receiving payments digitally, there are some situations where digital B2B payments will not be widely adopted.

Companies that want to avoid taxes and regulations, for example, would likely resist B2B payments. A survey by the Better Than Cash Alliance found that just 20 per cent of surveyed SMEs in Nigeria paid federal taxes. More efficient tax collection would raise the costs of digital B2B tools and services, which could inhibit uptake.[25]

Another group that could push back is cash-starved businesses. One Kopo Kopo client, a Nairobi-based restaurant, said that it would be very resistant to using digital B2B payments, because of the faster payments enabled by digital money. The restaurant pays suppliers using checks. The suppliers then have to take the checks to a bank, stand in line, and cash the checks. The restaurant uses the time it takes to pay suppliers as a form of working capital. If the payments were to be deposited in the suppliers account immediately, the restaurant would have less working capital, which would hurt the business.

Other businesses in Kenya use post-dated checks as a form of credit. The post-dated check typically allows the merchant a 30 to 90-day grace period before the money is debited from his or her account. There currently is no electronic alternative to a post-dated check, which creates a large barrier to adoption.[26]

Some businesses may not adopt digital payments simply because the status quo is difficult to change. Many entrepreneurs want to focus on their businesses, and payments are not a large priority. Digital payments are sometimes seen as a distraction, rather than an enabler, from core business functions.

Bureaucracy may also thwart other businesses from adopting digital payments. Most payment providers are required to check business licenses and collect other "Know Your Customer" (KYC) information. If these requirements are difficult to meet, many businesses will simply opt out of digital payment tools and services.

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25 Brian Loeb. The response of large corporates and their value chains to government policies to shift to digital payments: Nigeria's "Cashless" policy," Better Thank Cash Alliance. January, 2015.

26 Julie Zollmann, Digital Retail Payments in Kenya: Making them Matter for Merchants. Bankable Frontier Associates. October, 2014.

Finally, while supply chain financing could enable more efficient businesses, the service is not free. Mr. Presta and other supply chain financing companies offer unsecured credit, meaning that the small businesses do not need to offer assets to access the loans. However, the loans will likely reduce the profitability of each transaction, and there is a danger that low-income users will not fully understand the credit offerings. This could open the door to unscrupulous credit companies to employ usurious practices that could exploit low-income business owners.

6 Trends affecting B2B payments

In the last few years, governments and multinational groups have begun to focus on SMEs as a way to improve the lives of poor people. This focus stems from the growing recognition of the role SMEs play in job creation and economic development. Many of these programs are designed to help SMEs extend credit through lending technologies.

However, access to finance and credit remain a huge barrier for the growth of the SME sector. This access is not evenly distributed. In 2013, an estimated 200 to 245 million enterprises were considered unserved or underserved by the financial sector. Banks in both developed and developing countries tend to avoid the micro, small, and medium-sized enterprises (MSME) sector, choosing to instead focus on the larger companies. This is due, in part, to an information asymmetry, low per-client revenue, and the expense of setting up branches in different parts of countries.

At the same time, there has been an explosion in digital money innovation throughout the world. There are now 271 digital money services spread across 93 countries, and that number continues to grow. However, there have been varying degrees of adoption of mobile money between businesses. The Groupe Spécial Mobile Association (GSMA) estimates that only 0.5 per cent of total merchant payment volumes are currently online.

These digital money systems could be part of a broader shift in global trade. If global trade continues to increase, the demand for cost-effective cross-border payment options will likely continue to grow. Companies like Alibaba and Western Union are trying to take advantage of this growth with digital cross border payment solutions. In the coming years, some experts have predicted that there will be a shift away from global supply chains and toward more regional procurement and manufacturing operations.

The availability of cloud computing and Software as a Service (SaaS) platforms is transforming both the ability for providers to offer solutions, and the ability of tech-savvy enterprises to incorporate these into their own systems. New low-cost, pay-as-you-go software allows small business owners to access tools previously reserved for larger businesses. It is true that adoption of these platforms has been uneven. One global survey found that only 16 per cent of accounts payable departments receive the majority of invoices electronically, while most receive their payments on paper. However, some companies, including Salesforce and Intuit, have had massive success offering SaaS platforms to small businesses. These hosted software solutions have the potential to change how B2B payments are made in the future, all over the world.

These digital tools have also seen more non-bank actors take major roles in the financial sector, potentially threatening traditional banks. Mobile operators, for example, have become some of the most successful digital money operators in the world. While this led some to fear that banks could be threatened, many of these digital money deployments have led to partnerships between banks and non-banks. For example, Safaricom and the Commercial Bank of Africa created a partnership to offer the M-Shwari micro-lending product. At the same time, this indicates a larger trend toward non-bank actors playing a significant role in the financial system.

Square and many solutions like it throughout the world have democratized merchant acquiring, dramatically expanding card acceptance amongst small businesses. The company, and others like it, now offer a range of complimentary services for small businesses including inventory management, scheduling, payroll, invoicing, etc. Solution providers focused on small businesses throughout the world can follow this precedent, providing holistic, integrated tools that make it easier to do business.

7 Second order benefits

If buyers and sellers were to widely adopt digital B2B payments, there are a number of second-order benefits, beyond the benefits to individual buyers and sellers. In some ways, these could be more important to the ecosystem as a whole than the benefits for individual buyers and suppliers.

Digital liquidity:

B2B payments could also give businesses a powerful incentive to keep value inside of digital money systems. If businesses are paid digitally by their business and consumer customers and have suppliers that accept digital payment, the utility of digital payments is dramatically higher. Right now, digital money is not replacing cash, but rather making cash more efficient. Eighty-five percent of transactions globally are still in cash. Even in Kenya, one of the most active digital money markets in the world, MasterCard Advisors estimated that 98 per cent of transactions were still made in cash.

One factor that holds back widespread adoption of digital money for financial inclusion is the cash in cash out (CICO) network. According to Ignacio Mas, "…cash in/cash out (CICO) points are like tollgates at the edge of the digital payments cloud." It costs poor people money to take money out of digital money systems, which creates a strong barrier to usage.

If buyers were able to use digital money to pay suppliers using B2B payments, those companies may be more inclined to accept digital payments from consumers. At that point, consumers would have more places to use their digital money, which would make them more inclined to leave value inside of digital money, instead of cashing out. This could create a virtuous cycle, where digital money systems retain more value and are made more efficient.

Lower costs:

Digital B2B payment tools could lower the cost of doing business. Buyers and sellers who adopt digital B2B payments would no longer need to pay someone to transport cash and provide security. If transactions are done by check, buyers and sellers no longer need to stand in line at the bank to cash the check.

These lower transaction costs could translate to lower costs to buyers, sellers, and consumers. Suppliers would not need to charge buyers as much, if their costs were lower. If buyers are purchasing goods and services at lower costs, those savings could be passed on to the consumer.

Economic growth:

MSMEs are a huge factor in any economy, especially in developing countries, where MSMEs generally represent more than 90 per cent of all firms. In Brazil, an estimated 99.9 per cent of all firms are MSMEs. In terms of employment, MSMEs provide 71 to 73 per cent of jobs in Chile and Colombia. Lowering transaction costs through the widespread use of digital B2B payments could make MSMEs more efficient, and could encourage more economic growth generally. Also, as previously discussed, the security provided by digital payments could also allow more MSMEs to hire on more employees, which would boost employment.

Path to formalization:

Many digital B2B payment tools and services require accounts at financial institutions, which require a degree of formalization among businesses. If the benefits of these tools and services were large enough for businesses, they could actually be a factor in motivating businesses to seek out bank accounts, business licenses, and other methods of formalization.

Second-order benefits example, Nigeria:

In 2014, the Central Bank of Nigeria approved new guidelines designed to promote digital payments. The bank stipulated that all businesses with more than 50 employees were required to use approved end-to-end e-payment platforms for all salaries, pensions, taxes, and supplier payments. The central bank doesn't currently have jurisdiction over non-financial entities, so the regulations are still considered non-binding. However, the moves by the central bank, along with other e-payment efforts, have helped companies stop thinking about "whether or not" to shift to digital payments and begin thinking about "how."

Now that companies have begun shifting to digital payments, the second-order benefits are becoming clear. The Nigerian Bottling Company (NBC) has found that digital B2B payments have helped the business in a number of ways. NBC drivers were often robbed when they carried cash, and the company began paying high insurance premiums to protect themselves. Digital payments have made the deliveries more secure and less of a target for robbers. Now, NBC has begun helping its domestic suppliers formalize their businesses with bank accounts in order to use digital payments. Some companies have reported lower costs, too, though that is not the primary motivation in going cash-less.

It is still not clear whether businesses are formalizing because of the benefits of digital payments, or whether digital payments are simply an added benefit of formalization. However, the benefits of formalization and electronic payments are strongly correlated.

Second-order benefits example, Peru:

The Association of Banks of Peru (ASBANC) and Pagos Digitales Peruanos (PDP) recently implemented an interoperable mobile payment system called Billetera Móvil (BiM). This system works between banks and mobile operators in the country to extend mobile financial services to the poor. To achieve this goal, however, the system needs to attract "digital liquidity" into the system.

One source of digital liquidity could be B2B payments. BiM is currently running a pilot with three large B2B distributors, including two multinational fast-moving consumer goods companies. PDP, the firm running BiM, is currently exploring three different methods to incentivize merchants to participate in the B2B pilot: training, compromise, and discounts. The organization is sending out trainers to help merchants understand how to use BiM. They're also relying on compromise, the idea that everyone (suppliers and buyers) will be better off using the B2B system. PDP is also organizing discounts offered by the distributors to merchants who pay using BiM. PDP will then track the pilot activity to determine which tactics are most effective to encourage more payments in the system.

One major barrier to the growth of BiM for B2B payments is the cash-in-cash-out network. There are not enough agents enabling BiM, especially in rural areas of Peru. If merchants cannot conveniently put cash into the digital payment system and, in turn, take cash out of it, they will be unlikely to use the system. This is one reason why pilots, like the one that BiM is running, are so important. If the large distributors benefit from the B2B pilot, the programs will raise the demand for cash-in-cash-out services. At that point, more agents are likely to begin offering services. Companies would then be more inclined to use digital B2B payments, creating a virtual cycle that could benefit the entire BiM system.

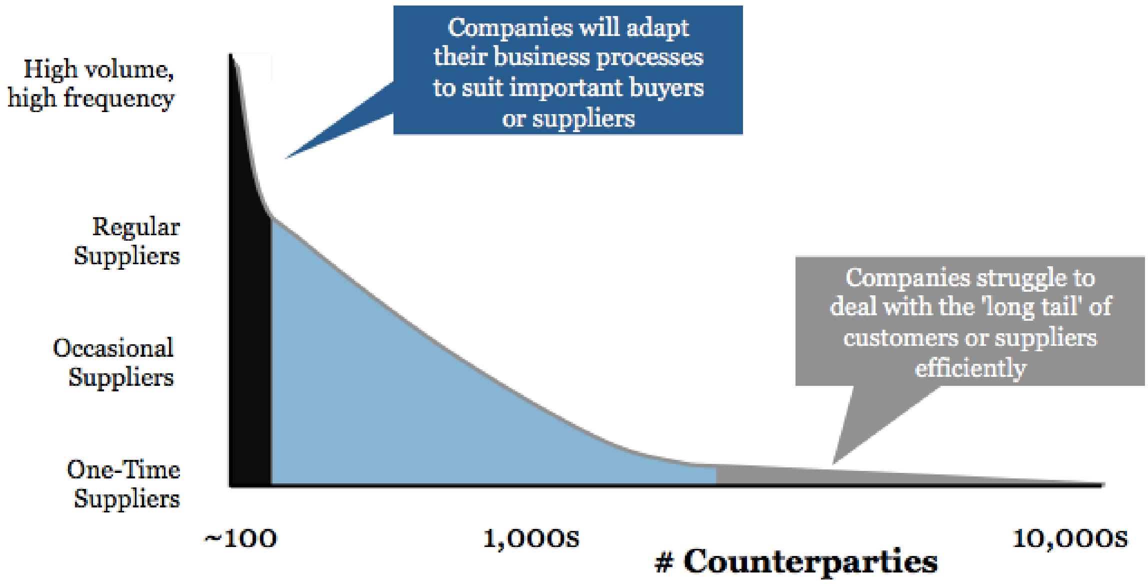
Under this system, the distributors will pay to receive payments, and the merchant will not pay to pay. This means that small merchants will be able to access the benefits of digital B2B tools and services without being charged directly. At the same time, with more transactions in the system, BiM will have more revenue. The system can then use that revenue to extend its services more widely, or it can lower the cost of financial services for lower income segments of the population. This could benefit the economy as a whole.

8 Barriers to B2B adoption

B2B payments are notoriously resistant to digitization. In 2011, 75 per cent of B2B payments in the United States (by count) were still made by check. In many parts of the world, cash is the only method of B2B payment available.

An overarching barrier to widespread B2B adoption is how to appeal to the "long tail" of suppliers. Even in developed markets, most businesses tend to concentrate on only their largest suppliers for efficient B2B payments. This means that most suppliers are left with manual, and often inefficient, methods of payments. This problem is more pronounced in poor countries, where many businesses are small and informal.

Figure 3 – The "long tail" of suppliers



To overcome this barrier, B2B payment solutions should be able to work for both formal and informal business owners. This will require a risk-based approach to regulation, meaning that low-risk transactions will face lower regulatory hurdles, no matter where they occur. Examples of regulations could include KYC and screening requirements. If businesses face too many regulations, many will simply use cash, instead of adopting more efficient methods of payment.

Digital B2B payment tools should also work on a wide range of mobile hardware across mobile software platforms. Smartphones accounted for only about 13 per cent of connections in sub-Saharan Africa at the end of 2013. Yet successful entrepreneurs are most likely to have smart phones rather than feature phones, therefore business solutions can partake of the enhanced mobile capabilities to build feature-rich digital payment solutions for B2B use cases.

At the same time, B2B payments may require more security than P2P payments. This is, in part, because B2B payments may be of higher value. The company CopSonic is attempting to provide that higher level of security on basic phones, using audio signals for authentication. However, any solution will need to manage the security of transactions against the ease-of-use.

B2B payment solutions should also include the ability to take out a percentage of payments in order to repay business cash advances, receivables financing, and other lending products. This will allow more credit to flow into B2B payments, enabling faster growth.

All of this must work within a viable business plan. Both small buyers and small suppliers are cost conscious. Any B2B product will need to be inexpensive enough to appeal to both parties, while also making money for the DFS provider.

While it may be attractive to think that even the most thin margin business models can work with sufficient transaction volume, providers should avoid the "network fantasizes" that plague many payment startups. Many of the most successful B2B networks have only a small number of companies signed up. Therefore, providers need to find a way to achieve a sustainable business model without massive scale.

Finally, B2B payments will be more widely adopted when digital payments generally are more widely accepted. This means that a sufficient network of CICO points is a necessity for B2B payments. Also, this is why closed-loop systems present a barrier to widespread use of B2B payments. Many digital payment schemes are so-called "walled gardens," making it difficult to send money from one digital money system to another. Interoperability would make digital B2B payment tools more widely accepted, and therefore more likely to be adopted.

9 Considerations for financial policy makers

B2B payments are difficult to digitize. There are many informal companies, and some businesses that will generally push back on any digital payments. However, policymakers should consider the relevance and impact of the following factors that may encourage digital B2B payments tools and services, and help the digital financial ecosystem as a whole.

- **Evaluate factors that make it easier for informal businesses to make digital B2B payments:** Countries are taking a risk-based approach to regulating payments, including, in many countries, creating a tiered structure for KYC regulations. Poor business customers, as well as consumers/purchasers, can benefit from the same approach, enabling them to access digital B2B payment tools.
- **Examine how subsidized credit for SMEs can motivate adoption of digital B2B payment tools:** In many markets, subsidized credit could provide a strong incentive for businesses to begin moving payments to digital systems. With a tiered KYC structure in place, subsidized credit could also allow businesses to progressively formalize as transactions grow.
- **Determine feasibility of interoperability:** Digital B2B payments are more useful when they are more widely accepted. As policymakers evaluate the extent to which digital money systems are able to interoperate, consideration may be given to B2B payments as well as other use cases.
- **Monitor the role of e-invoicing:** Where e-invoicing has been mandated, digital B2B payment and lending providers can take advantage of the widespread digitization necessary for even the smallest businesses to comply. Chile, Brazil, Mexico, and Argentina have begun mandating that businesses issue e-invoices. The hope is to push businesses to formalize and to pay more taxes. It is too early to know the full effects of these regulations, however, policymakers may want to monitor outcomes in these countries and the extent to which they drive digitization of payment and lending.