Processes: Connecting the Dots for Payments Growth?

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Introduction

Every day, billions of payments transactions take place all over the world. In the United States, a typical consumer’s day comprises numerous exchanges of value as she buys her morning coffee, fuels her car at the pump, stops for groceries and a pizza, pays the babysitter, and perhaps, pays bills and shops for a gift online. This same consumer may also travel, buying goods and services in a different town, state or even country.

A variety of individuals and businesses perform the role of merchant for just one consumer in widely varying and sometimes unpredictable locations, many even online. Yet all of these transactions work flawlessly nearly every time. For the consumer, it’s simple – she pays and walks away with her goods.

Behind the scenes, however, the process is anything but simple. It’s enabled by a massive infrastructure that connects these retailers and other businesses with the banks and credit unions that issue her payment method, as well as those of countless other consumers. The payment devices vary as well. They could be cash, debit or credit cards, checks, payment fobs, stickers, ACH payments and even mobile phones.

During the past several decades, many individuals and businesses have looked at this elaborate system and thought they could make it better, richer. Perhaps their vision was narrowly focused on a consumer experience – a way to simplify paying the babysitter, allowing the consumer to set up a payment directly to the sitter’s account instead of writing a check.

Or perhaps their vision was broader or stemmed from the potential within a new technology: How could you lower payment acceptance costs for merchants? Or why couldn’t you take that jumble of cards in your wallet and put all of the information they contain onto a single device?

However, the payments landscape is littered with the bones of payment ideas that didn’t make it. Some of them simply may not have been viable ideas. But many have been great ideas. Some were even the brainchildren of people with vast experience in payments, who struck out to connect the dots in a different way. And some were projects originating from large companies with plenty of capital behind them.

What Does Success Look Like?

For a payment innovation to be successful, it must gain critical mass on two sides: issuing and acquiring. The issuer delivers the payment device or method that allows the consumer access to his or her funds. On the acquiring side, stores must be able to accept that payment method and then be able to turn the transaction into money.
Both sides of the transaction derive value from the level of participation on the other side. This is a concept known as the “network effect.” As participation in a networked system grows, that system becomes more valuable to all the other participants. As the system becomes more valuable, it attracts more participants, resulting in a natural cycle of growth.

This effect results in the classic “chicken-and-egg” dilemma of growing a network. For both issuers and acquirers of a transaction, it’s important that the other side have critical mass. If you issue a card that can only be used in one place, it will have limited utility. At the same time, if a merchant must invest in the equipment and the processes to acquire a certain type of transaction, it must determine that the investment is worthwhile – that enabling that type of transaction will attract consumers, increase loyalty and sales or lower their acceptance costs.

Challenges to Developing the Network Effect

So how does a system evolve in a way that enables it to acquire this critical mass? After all, there are a number of challenges. The economic model must provide value for all of the players involved. Each entity within the ecosystem must make its own business case to invest and participate in the system. If the model doesn’t provide additional value in some way – additional revenue for financial institutions, increased sales for retailers, increased control, immediacy and recognition for consumers – it will not succeed.

How do the players considering the idea know which new system will succeed, and where to place their bets by investing their efforts and their financial resources? While they want to be ahead of their competitors and take advantage of opportunities to enhance their relationships with their customers, when is the appropriate time to jump in? They don’t want to jump too early and invest in a system that does not end up paying them any dividends for a number of years. Worse, they don’t want to jump in and invest in a system that is ultimately jettisoned by the industry for another choice.

In addition to providing economic value to the different players, the new system must be able to connect them and manage the complex relationships that connectivity invites. Proprietary – and sometimes competitive – information and systems must be connected. Doing so requires not only technical infrastructure but also business acumen and a sense that the system will not favor one side over the other.

The Role of an End-To-End Processor

A successful network must then have certain elements to succeed. The presence of these elements is not enough to guarantee success, but failure on any single component can kill even a truly great idea. End-to-end processors – third-party entities that process transactions on both the issuing and acquiring sides – are well-positioned to provide many of these elements for success.

Scale: If the ultimate goal is reaching the critical mass that will enable the network to begin to grow organically, feeding on the success of the players already present, it will be crucial to have a plan to bring volume into the system.

Processors are a natural place to look for this volume. A processor already has relationships with a large number of clients, either issuing or acquiring. This means that, in many cases, they can
make a change to a platform and make a solution available to a significant number of potential participants with relative ease.

Low-cost processors with scale economies have created more competition in the payments system, adding value for all of the participants involved. They have enabled small banks to compete cost-effectively vs. large banks without having to build their own in-house solutions. They have brought additional merchants into card acceptance by providing the technology and sales force to open new categories and expand payment penetration. In addition, they have helped reduce fraud by bringing solutions that helped decrease risk for all the parties involved.

**Business Relationships:** In addition to the sheer number of clients a processor can bring to bear on a network, they also offer expertise in managing other business relationships. In some cases, it will be necessary to manage multiple service providers to enable the service or technology. This is a natural extension of a processor’s traditional role of sitting between the issuer and the acquirer as the enabler of transactions.

Processors may already have relationships with relevant organizations to deliver existing services and are experienced in negotiating contractual agreements and facilitating great outcomes for all parties involved. In this role, an end-to-end processor also brings much needed neutrality to help reassure players that their interests are as valuable as those of the other players.

**Transaction Processing Expertise:** Regardless of how funds are accessed or how transactions are acquired, there are enabling functions that remain largely the same across payments ecosystems. These include mechanisms to authorize, route and settle the transactions; secure the data; and manage disputes, chargebacks and customer service. End-to-end processors already have an enormous, robust infrastructure in place for securely handling customer, financial and transactional data and ensuring that the transaction works dependably, with consistent system up-time. They are also neutral to the payment instruments they service, already processing transactions for checks, debit and ATM cards, credit cards and prepaid cards, as well as alternative payments and ACH transactions.
Another important aspect of growing a network is the emergence of standards. In payments, end-to-end processors can help define and proliferate the technical- and transaction-related standards that allow any issuer or acceptor of various payment products to plug into the same ecosystem and expect the same performance at the best value, in alignment with regulations.

An end-to-end processor connects the varied pieces together. It can provide the infrastructure and standards to enable the ecosystem to fully function. It also can push on multiple fronts and build acceptance of a payments network with its broad reach – all elements that give the system its best chance of building on itself and becoming successful. Processors are key to building those effects, so the payment devices have the broadest possible purchasing power for the consumer.

**Enabling the Network Effect in Mobile Commerce: A Case Study**

Today, nowhere is the issue of network effect more evident than in the burgeoning field of mobile commerce in the United States. Currently, virtually everyone in the U.S. carries a wallet with some money and other important pieces of information, as well as a mobile phone. Enabling consumers to conduct transactions with their mobile phones and leave their physical wallets at home has the potential to give them power and create richer experiences.

As an illustration of the utility, consider maps. Historically, they were static – something you carried in your car and updated occasionally by purchasing a new one. You could use markers around you to identify where you were on the map and trace where you needed to go. The process worked, but with the advent of mobile phones and location-based technology, it’s clear how much richer a map can be. We are now able to allow the map – which is always up to date – to show us where we currently are and provide dynamic directions to get us where we need to go, even rerouting our travel based on traffic conditions. We can even identify an appropriate restaurant or hotel along the way and download location-based coupons, giving a voice to smaller merchants.

We have the same opportunity to use this technology to enrich the experience of commerce.
for consumers in the United States. By replacing the wallet with the mobile phone, we can use the power of what is essentially a small computer with a display and a keyboard to create commerce experiences that are much richer than just swiping a plastic card through a magnetic stripe reader.

The technology is available to make this happen, and it is already happening globally. The progression is so natural it seems inevitable. Yet, to fulfill this promise and move to full mobile commerce in the United States, the industry must accelerate that network effect – growing the participant base to a critical mass and adding value for all of the participants in that ecosystem.

Mobile commerce also adds a third piece to the classic equation of issuance and acceptance – the mobile handsets, with technology that enables mobile devices to send account information to contactless readers at points of sale. Mobile carriers are a new entry to the payments ecosystem, because they help distribute the phones, and influence the technology within the phones.

Contactless-enabled phones appear in the market today. There are already a number of wallet applications available, many offered by banks and independent mobile account management service providers. Pilot programs that involved giving a limited number of consumers the ability to make purchases with contactless-enabled phones at one or two locations support the viability of the idea and have used technology that already exists.

Yet despite the fact that this great idea works like the industry hoped it would and the technology exists to achieve it, we may still be years away from ubiquitous usage of our mobile phones as wallets. Right now, the industry is in the process of putting the pieces in place to generate the network effect.

The penetration of smartphones is accelerating the growth of mobile commerce. Yet the players face the same classic quandary: Handset manufacturers don’t know whether it’s the appropriate time to invest in contactless technology. Merchants don’t know whether it’s the appropriate time to invest in the equipment necessary to read the chips, and issuers don’t know whether
it's the appropriate time to invest in provisioning the accounts. To grow this entire ecosystem collectively, many pieces – both business and technological – must be in place. Turning a mobile phone into a wallet involves adding these components to a device:

- Contactless chips, which enable mobile devices to communicate with customer checkouts. They also read information in contactless-enabled tags placed on objects, such as advertising collateral.

- Secure elements, which are smart card chips that store and access applications and data in a secure manner.

- Electronic wallet applications that provide a user interface to allow the user to manage accounts and initiate payments. These interfaces allow a consumer to access the wallet full of “cards,” such as credit, debit, prepaid gift card, other stored-value accounts, public transit tickets or merchant-specific loyalty cards.

- Personalized account information loaded directly onto the phone.

To connect some of these dots and accelerate the adoption of mobile services, the industry has embraced the concept of a trusted service manager (TSM). TSMs address what may be the biggest challenge to realizing mobile payments within the mobile commerce ecosystem: bringing multi-account services to different mobile devices accessed through a variety of proprietary networks.

The core function of the TSM is to securely distribute, provision and manage the lifecycle of contactless applications to the customer base of mobile network operators on behalf of service providers. Yet the TSM role is much broader than providing only the technical capability to provision and personalize contactless applications over the air. The TSM manages contractual relationships between many mobile network operators and numerous service providers. And the TSM provides an array of supporting business services, including customer service, data center hosting and quality assurance.

Critically, the TSM is one entity in the mobile commerce ecosystem that has a view of the intersection of the customer base of the mobile network operators and the service providers. This is a natural extension of the role that end-to-end processors have typically performed. Processors...
already provide provisioning services to card issuers. These services involve storing personal account information in accordance with Payment Card Industry Data Security Standards (PCI DSS) and transmitting that data during the card-issuing process. As a major global processor, First Data performs this provisioning service today and has more than 700 million credit and debit accounts on file, which represents about half of all active accounts worldwide.

Each card in a wallet represents a separate provisioning process, involving different financial or merchant entities. Companies that offer provisioning services typically maintain contractual relationships with many of these entities to collect the essential personal account information needed for the provisioning process.

Clearly, no single organization has control over all of the assets and functions required to create an end-to-end mobile commerce ecosystem. Yet some entities are better positioned than others, because they already fill more than one of the critical roles in the system. An end-to-end processor might have a debit network, a financial institution issuing/processing business, a merchant-acquiring business and a prepaid issuing/processing business.

Serving as a mobile TSM, the processor can help drive the growth of mobile commerce. The role involves pulling together the right set of ecosystem participants and ensuring these participants operate together seamlessly. This centralized role helps to maximize the commercial potential of mobile commerce across the entire body of participants, because it minimizes fragmentation of the market as players pursue their own special interests.

This type of solution results in a critical mass of consumer, service provider and merchant activity that draws other participants into the fold, supporting robust and diverse mobile commerce.

**Conclusion**

Regulatory, competitive and technological change in the payments ecosystem over the next 24 months will be rapid and transformative. Whether we are considering mobile or another evolving transaction ecosystem such as prepaid accounts or social commerce, end-to-end processors are uniquely positioned to fulfill a critical role in building the ecosystems that grow and flourish in this environment.

The future payments industry will still contain the fundamental aspects that exist today. New payments ecosystems will continue to need scale and transaction processing expertise. But they will also involve new network players – players who can be more rapidly enabled by processors whose role already requires connecting the dots and growing a great idea into a viable and thriving system that brings value to all of its participants.