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A few months ago, I took a trip through hot, dusty Monument Valley on the Utah/Arizona border. Along the way I aimed to stop at Goosenecks State Park, a natural phenomenon of winding water twisting and turning through canyons. As I pulled up to the entrance, I saw there was a pay booth with a five dollar entrance fee. Horror-stricken, I slowed the car down and started to panic. I turned to my husband and said, “I don’t think I have any cash. Do you have cash on you?” We stared at each other like trapped animals. Too late, we were already in line, inching up to the booth. We both flailed and tore through our wallets looking for cash. Finally we pulled up to the booth I sheepishly said, “I only have this lucky two dollar bill I’ve been carrying with me for years.” “That’s all?” “Yeah – um, I don’t have three more dollars.” The attendant took a hard stare at me and said, “Ok, I’ll take that two dollar bill,” and waived me through.

I am 30, and can guarantee many people my age have had this exact same problem. In fact, I can guarantee people 30 years older than me have had this exact same problem. Nobody carries cash anymore – not even for incidentals while traveling. It’s hard to remember a time when people carried a fat stack in their wallets. The dynamics of “moving” money has changed so drastically in the past two decades that it is impossible to write a single article on the subject. Not just the element of cash, but checks, transferring money, checking accounts, credit/debit cards, and so on. Credit unions struggle to keep up as members expect them to be in line with their money-moving habits, whether it is a robust card-rewards program, a large ATM network, or a P2P option. I interviewed a few of my coworkers at CU Service Network to see a bigger picture of how much really has changed.

Anne Holmstrom is the Accounting Manager for CU Service Network’s Outsourced Accounting Service. She has worked in the credit union industry for decades. She recalled how much check-writing has changed in the past 30 years. “Back in the 1980s as a college student in a small, mountainous Colorado town, I did the normal weekly run to the grocery...
store,” said Anne. During one such shopping trip, she ran out of checks, and was mortified.

Not to worry because – little known fact – young, naïve Anne could have written a “check” on any variety of paper or door and if the vendor chooses to accept this as form of payment, it is considered legal tender. And that being the case, the grocery store clerk pulled a stretch of blank receipt tape out of the register and told her to write a check on it. You can even read about such hilarious cases in “Cecil’s Storehouse of Human Knowledge” – like when a man in England painted a check on the side of a cow, or when a steel-worker from Cleveland created a check out of steel with an arc-welder.

I asked Doug Burke, President/CEO of CU Service Network, to share some of his thoughts on how money moving trends have changed. “You hire someone and you need a blank check for direct deposit, and they go ‘I don’t even have a check!’” And really, why would most people have a check? “The government doesn’t like to issue checks because of fraud; Social Security and government benefit checks have to be direct deposited. Even the electric and cable companies won’t accept checks,” said Doug.

Before Checking Accounts Existed
Trisha Wiggin-Fausnaugh is the Operations Manager at CU Service Network. Her credit union history goes all the way back to 1981, when she started out as a credit union teller. As you can imagine, a lot has changed in the money moving industry since then. In particular are checking accounts. Trisha explained, “The credit union had shares (which paid 7%). Nobody had heard of Individual Retirement Accounts, and the NCUA was working diligently so that credit unions would be allowed to offer a checking-like product known as share draft accounts. If a member wanted a large withdrawal, the credit union would cut them a check drawn on the credit union’s account with the bank down the street. Corporate credit unions didn’t offer checking accounts either.”

Try explaining to a member that a share draft account is like a checking account but not a checking account, while still convincing them to open one.

Eventually Trisha’s credit union was able to offer share draft accounts to their members. Trisha said, “Under the Uniform Commercial Code, credit union members wrote drafts, not checks, and shared draft accounts were share accounts, not demand deposit accounts. Try explaining to a member that a share draft account is like a checking account but not a checking account, while still convincing them to open one. It was so much easier when we could open checking accounts and call them checking accounts.” Right…..

While we are on the subject of checking accounts, let’s bring up how much savings accounts have changed, as well. “In late 1981 and 1982, we offered All Savers Certificates. The minimum deposit was $500 [the present-day equivalent of $1,300], Certificate holders received a one-time tax exemption on the interest. All Savers Certificate went away when a far superior product, Individual Retirement Accounts, came along,” said Trisha.
ATM Cards That Only Worked In ATMs (!?)

“It’s the 50th anniversary of the ATM this year,” Doug noted. “Before, you had to match your card to the ATM, whether it be Plus or Cirrus. Now you can go to any ATM and get cash,” he said.

Trisha, too, commented on how ATMs have changed. “We did have ATM cards. They only worked in ATMs. Debit cards that could also be used in ATMs came later. We used to offer check guarantee cards as well. Merchants who took member checks would be guaranteed payment up to a certain dollar amount if they could provide the information from the card.”

Earlier I pondered why someone would have a check laying around. Now I am pondering why someone would use cash over a card. Doug said, “People like rewards. They like their miles and points. You can’t get those with checks. And it made sense for credit unions to get a debit card in every member’s hand because the credit union could make the interchange fee on them.”

Unfortunately, I wasn't able to earn points on my five dollar Goosenecks State Park fee, and to add insult to injury, I lost my lucky two dollar bill.

While some options, like checkbooks and ATMs, continue to hang tight to the cliff, other options, like travelers checks, have all but been officially pronounced dead. What can we do...?

How are credit unions able to keep up with the ever-changing shifts in money moving and member convenience? While some options, like checkbooks and ATMs, continue to hang tight to the cliff, other options, like travelers checks, have all but been officially pronounced dead. What can we do to help credit unions continue to provide what members need, and what the industry demands?

I hope you enjoyed part one of our History of Moving Money series. We’d love for you to share your stories too, both on how things have changed and how you keep up with new member services.

About the Author:

Alicia Disantis is the marketing program manager at CU Service Network, a Denver-based CUSO specializing in back office solutions. She is passionate about graphic design, branding and the showcasing the power of credit unions.
Credit and debit cards have become the noncash standard way to pay merchants, due to ubiquitous acceptance and worldwide standards. But when it comes to paying another person, there is no standard way to do so, and many hurdles stand in the way of completing a person-to-person (P2P, sometimes called peer-to-peer) transaction. It certainly is not due to lack of need. Roommates splitting the rent and the utilities, diners sharing the bill, friends sending monetary gifts for a birthday and travelers splitting vacation costs are the top five use cases for P2P payments, which represent $50-$80 billion in payments.

This number is hard to pinpoint, since the vast majority of these P2P payments are still being made using cash and, to a decreasing extent, checks. There is growing market demand to eliminate the need to make a trip to the ATM and then carry and hand over sometimes large sums of cash, and many vendors have stepped up to offer solutions.

P2P solutions come in two flavors: bank-centric, that is, provided by a credit union or bank, or more specifically by a vendor to the financial institution, and non-bank centric, that is, P2P solutions that are not affiliated in any way with financial institutions. P2P transactions can be initiated on the credit union's or bank's website, or on a mobile app, usually provided by a third-party P2P provider.

Funding for the payment can come from stored value, debit or check card, or direct debit from a bank account. And payment transfer is accomplished from the payer to the payee by one of several means: using ACH, using debit payments or using an intra-P2P provider. There is an additional
category for when the payments cross international borders. This is referred to as international remittances, and while technically can also be P2P, is not considered part of this market.

**PayPal**
Three of the more popular P2P services have much in common: they are not affiliated with banks, and they are also wallets, meaning users store funds in their P2P account until sending a payment or offloading to a bank account. In fact, if PayPal were a bank, its collective holdings in all of the individual accounts would make it the 21st-largest bank in the U.S. Oddly enough, PayPal didn’t start out as a P2P service. It was the way to pay a merchant on eBay. From there, it grew to include 202 countries and 188 million active users who are sending, receiving and holding funds in 25 currencies.

**Venmo**
If PayPal is the largest, Venmo is the fastest growing. Specifically, Venmo processed $4 billion in transactions in Q2 of 2016, compared with $3.2 billion the previous quarter. This is a 25 percent growth per quarter and 140 percent growth per year. Venmo’s phenomenal growth is driven almost completely by word of mouth, and almost exclusively among millennials, driven by Venmo’s embrace of a social model. Venmo is only available in a mobile app, which especially appeals to millennials. In addition to sending and receiving payments like on PayPal, Venmo transactions are shared in a feed (without the dollar amount) so friends can see what their friends are doing. Venmo also encourages splitting of bills. The average Venmo transaction size is $2, reflecting the usage patterns of the youngest millennials. Whereas PayPal is profitable ($9.2 billion in revenue moving $282 billion), Venmo is not. Even though millennials use Venmo to move more than $1 billion each month, the cost of operations and paying for ACH and debit transactions makes Venmo a money loser for its owner, which, interestingly enough, is PayPal.

One of the reasons for the lack of profit is that whereas PayPal started out being and still remains huge in the B2C space, that is, paying merchants for goods, Venmo remains P2P. Also, Venmo is open to scams, since it relies on ACH; scams that primarily occur when Venmo is used to receive money from strangers who buy things on Craigslist. The buyer pays using the Venmo app, and the seller gets the alert that he or she has been paid. But the buyer can cancel the transfer of funds after receiving the goods but before the money is taken out of the sending account. And since Venmo is not regulated by the CFPB, users have little recourse. Venmo acknowledges this in its terms and conditions by saying: “Avoid payments to people you don’t know, especially if it involves a sale for goods and services.”
DWOLLA
While Venmo continues to grow the number of users who download and use the app, Dwolla is trying to shed its app users and pivot from paying people to paying companies. Dwolla will now focus on providing payment application interfaces that can be embedded in companies’ own apps and websites to allow consumers to make payments from their Dwolla stored-value or from their bank accounts or credit or debit cards.

Zelle
This past September, Early Warning Services LLC, the parent company of ClearXChange, announced a rebranding of the product to Zelle in conjunction with the release of a mobile app in an effort to better compete with Venmo. Release is expected in 2017, and already, 19 credit unions and banks have signed on to be part of the launch, with many more expected. Zelle will add to basis P2P functionality some features not found in competitive offerings: users can deposit a check and have immediate funds availability; users can set up bill pay and make payments to merchants in real time and Zelle can be used for B2C and G2C disbursements, such as tax refund checks, government benefits and insurance claim payouts. Even with these features and no fees, it will be a challenge for Zelle to start from zero users and surpass Venmo in recognition, adoption and usage.

Popmoney
Popmoney works similarly to ClearXChange in that it draws from and deposits directly to a savings or checking account, rather than a separate stored-value account. And like ClearXChange, it is usually accessed directly from the credit union or bank’s online or mobile banking site. Thousands of banks and credit unions offer Popmoney to their members and customers. Popmoney transactions are handled by Fiserv, which is an online banking service that handles around 70 percent of all bill payments made at U.S. financial institutions.

ClearXchange
Most of the major U.S. banks offer person-to-person (P2P) payment transactions through their mobile apps or websites. ClearXChange and Popmoney are the two largest P2P examples of vendors that facilitate these transfers for their member credit unions and banks.
ClearXChange is accessed through mobile banking apps from seven (as of this writing) U.S. banks, including Bank of America, Capital One, Chase, First Bank, U.S. Bank and Wells Fargo; however, ClearXChange can be used for free even if one side of the transaction does not bank with one of the member banks. ClearXChange doesn't do any of the actual transferring of funds, but rather provides the information the member banks need to complete the transaction. Since ClearXChange was founded by large, national banks, the security protocols that this P2P payment service uses are bank-grade and match what the banks use.

**Snapchat**

Another popular social media giant, Snapchat, launched its P2P service, Snapcash, about four months before Facebook, adding P2P to the text-chat function of the popular mobile app that allows users to send pictures or videos to other Snapchat users, with the photo or video self-destructing within seconds of being viewed. The Snapcash function works like Facebook’s in that the user sends or receives payment directly to a debit or credit card. However, Snapcash was built on top of Square Cash, the P2P service provided by Square, which is the largest payment processing service for small business and individuals.

**Square**

And since Square has been in the business of processing business payments since 2009, it grew up with security as a core requirement. Square Cash P2P payments, and therefore Snapcash payments, are PCI DSS secured at the level of Square’s e-commerce transactions, so they have the same internet security as online businesses. And since Snapcash is built on Square Cash, users on either service can send funds to each other.

**Google Wallet**

Google's history with P2P has taken many twists and turns to become what it is today. Google first released the Google Wallet payment service in late 2011. It consisted of a stored-value account linked to a bank account or debit card, a mobile app that could be used for payments where NFC was accepted and a plastic card that could be used to access the stored-value account where NFC was not available.
Then, in 2015, Google acquired the mobile wallet Softcard, which was a payment app offered by the major U.S. carriers AT&T, Verizon and T-Mobile. Google Wallet would come bundled with Android phones offered by those three carriers as a competitor to Apple Pay. The Google Wallet app on these Android phones was renamed Android Pay. The Google Wallet nomenclature was redefined to denote the P2P payment service, including the stored-value account, accessed from a new mobile app (separate from Android Pay, but now also available on iPhones), from Gmail and from the associated plastic card. But in early 2016, Google announced that it was dropping support for the plastic card. Recently, Google added access to P2P payments from its web browsers.

**Facebook Messenger**

Facebook Messenger has become ubiquitous for online chatting. Facebook embedded the ability to pay other Facebook messenger users from within the app in March 2015, quickly climbing to sending over 1 million payments a day. Payments are sent to/from a Visa or MasterCard credit or debit card and can take three to five days to clear, depending on the underlying bank. Facebook has recently started encouraging companies to sell products through its Messenger bots by adding a buy button, giving people the ability to buy products from a bot without needing to leave Messenger. But like Venmo’s mobile app, fraud scams are frequent, and Facebook warns its users to “Only send to or receive money from people you know” and to watch out for fraudulent schemes such as romance scams, lottery scams, donation scams, inheritance scams and loan scams.

**Apple Pay Cash**

Pay Cash from Apple is the most recent entry in the growing list of P2P options. Pay Cash works in Apple’s iMessage on iPhones, iPads and Apple watches, meaning it only works among Apple owners. Money sent to a recipient goes on to a virtual debit card issued by Green Dot, making Pay Cash a stored-value solution. But the stored value can be spent using Apple Pay in stores or in-app/browser, giving Apple users an advantage over other P2P competitors. Stored funds can also be transferred back to a bank account. Apple owners can use Siri to launch a payment. Or a mention of owing money or making a payment in a message will bring up the Pay Chas button. Despite being late to the party, Apple’s base of over 85 million iPhone users give this P2P solution a leg up on driving adoption.
Who will win this highly competitive opportunity?

Which P2P service will dominate this growing piece of payments, and more importantly, replace cash and personal checks with a seamless, intuitive and secure method of payments? Only time will tell, but there are some clues based on who’s ahead in the market today.

Mobile app – The best service needs a great stand-alone app that is easy to use by every generation, even on the first use. Venmo certainly wins in this category, but the Zelle app shows great promise.

Recognition – PayPal has the most name recognition when it comes to P2P payments. It had a major head start. Google has one of the most recognizable brand names worldwide, but it may not be the brand that comes to mind when paying a roommate. Venmo has great brand recognition for P2P, but only among the under-30 generation. Zelle and Popmoney have virtually nonexistent name recognition among consumers, primarily because banks and credit unions have buried their P2P service in their digital banking platforms three or four clicks down. For banks to grab ahold of this industry, they need to put access to P2P service on the mobile app home screen or online landing page.

Sharing/Social – One of the biggest factors for Venmo’s success is its use of social network sharing. Facebook and Snapcash have an advantage in that they are social platforms before they are payments platforms.

Fees – As can be seen in the comparison chart on page 4, fees are all over the place. But there is a deep-seated perception that P2P is an alternative to cash and checks, which cost the sender and receiver nothing, so P2P should work the same way. Charging fees to cover credit card transactions should only be the case when the merchant pays those fees, not the sender. It may be a better strategy to not accept credit cards for P2P rather than charge fees to use a credit card for P2P. Fees introduced early in the process will easily kill off adoption.

The great news is that there doesn’t need to be, nor should there be, just one winner. Visa and MasterCard have existed side by side in the payments space since the ‘60s. But the P2P market is much more fluid than the early days of payment cards, and users can easily migrate from one service to another as soon as something better comes along.

About the Author:

Lou Grilli is the director of Payments Strategy at CSCU and is responsible for providing leadership to the organization for emerging payments and industry trends, as well as managing the product portfolio. Prior to joining CSCU, Lou was director of mobile products within the North American Retail Payments division at FIS. There, he was responsible for enabling seamless access from smartphones and tablets to FIS products and services. Lou holds an MBA from Duke and a master’s degree in computer engineering from the University of South Florida.
Credit unions and many other organizations have long admired Uber for its signature friction-free app. In fact, the ride-sharing startup is often hailed as a pacesetter in user experience circles. What fewer people talk about is Uber’s emerging command of machine learning, an artificial intelligence technology.

The application of Michelangelo (Uber’s machine learning platform) to UberEATS is noteworthy. The food-delivery arm of the business, UberEATS is relying on machine learning for delivery time predictions.

Because Uber is known for its accuracy on ride-share arrival times, the company aims to “deliver” the same experience to in-home diners. Yet, food prep and distribution is an entirely different ballgame – one that requires the intelligence of machines.

Michelangelo relies on an immense amount of data. Time of day, location, historical data and average times are collected, analyzed and used to calculate delivery time. The data is also leveraged for learning. Michelangelo pays close attention to the past to predict delivery times more accurately in the future.

As machine learning and other forms of artificial intelligence are deployed in mainstream services, consumer expectations for seamless, hyper-personalized and predictive experiences are only going to increase. How will credit unions respond?

Machine Learning in the Movement

Alongside its credit union clients, CO-OP Financial Services (www.co-opfs.org) is formulating an answer to that important question. The credit union leaders who partner with CO-OP on innovative payments solutions are actively engaged in the co-creation of machine learning and artificial intelligence platforms that will ultimately benefit the entire movement.
In fact, CO-OP will soon enable the technology for the benefit of institutions and their members. Here’s how:

Predictability is crucial to providing hyper-personalized banking services. Using data that flows in and out of the CO-OP ecosystem, analysts can derive insights that predict what’s ahead for the client credit union members we collectively serve. Models that predict everything from member attrition to credit card delinquency help institutions intervene to keep their members and the cooperative financially healthy.

**Predictive Models Transform Banking**

The more data we take in, the more likely we’re able to identify and predict performance using machine learning. The CO-OP ecosystem, encompassing 30,000 ATMs, the second largest branch network in the U.S. and more than four billion payment transactions, generates a vast database. When machine learning algorithms that teach and adjust over time are applied, the insights are real – and actionable.

Take, for example, two predictive models we are using right now to help credit unions execute credit line increase and delinquency prevention strategies.

Each model predicts, up to three months out, which eligible cardholders are most likely to utilize a credit line increase, as well as which are most likely to become delinquent. Presenting credit line increase promotions only to those identified by the model optimizes revenue for the credit union. Similarly, taking a proactive approach to managing only the most-probable delinquencies puts efficiency at entirely new levels.

In the very near future, credit unions will have the ability to apply machine learning technologies and predictive models in exciting new ways. They'll transform the member experience, develop innovative banking solutions and perhaps even discover new forms of revenue.

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**About the Author:**

Bill Prichard is Director, Public Relations, for CO-OP Financial Services, based in Rancho Cucamonga, California (www.co-opfs.org), a provider of payments and financial technology to credit unions.
As part of our special edition newsletter focusing on Moving Money, we were fortunate to be able to sit down with Chuck Fagan, President and CEO of PSCU, the nation’s leading CUSO and winner of NACUSO’s CUSO of the Year Award in 2016. We wanted to get his perspective on the future of the payments, an area in which PSCU is well-versed.

Here’s what Chuck had to say:

There are a couple of buckets particularly relevant now and as it relates to the future of payments:

The first bucket has to be mobile and digitization, as evidenced by the fact that nearly everyone is headed towards smartphones. It’s actually funny that we still refer to them as phones since most people don’t even make calls on them anymore! We’ve evolved from desktop computers to smaller more portable tablets to “put in your pocket”-sized smartphones. Smartphones have changed the way we go about our daily lives, to the point we are able to accomplish tasks like doing our Christmas shopping from the cell phone lot at the airport. Think about that for a minute: Amazon Prime, free shipping, two-day delivery, even gift wrapping – all done with a simple tap.

2016 was the year that digital traffic exceeded retail sales – the tipping point, if you will. We have officially shifted away from browsing the aisles of brick-and-mortar stores to searching for exactly what we want online.

Most credit unions today are challenged with serving four generations of members. Some members still write checks and contact the call center to verify receipt of their direct deposit. Other members are heavy ATM users and online bankers that never set foot in a branch. And still others – Millennials – expect their credit union to be fully optimized for mobile.

Mobile wallets and tap-and-go transactions are still in the early stages, but we anticipate they are here to stay. They may evolve, but if it’s tied to the smartphone, it has a future.
The second bucket is data. When you think about how much member data is associated with payment trends alone, it is mind boggling. For example, my older daughter got married in 2016, had a baby in 2017 and bought a new house that same year. You can see these purchase patterns pretty easily, so the really good issuers of payment devices know where she and her husband are in their financial lives and can use that data.

Credit unions are having to combine information from multiple sources more and more often – for example, information from their core with call center transactions with in-branch activity. Taken as a whole, this information paints a picture of the member and can help credit unions anticipate their next financial move and the needs associated with it. I think you can make the argument that payments is now more indicative of the PFI (Primary Financial Institution) relationship than the age old definition of a checking account.

The third bucket is overall protection of credit union assets. Fraudsters are not willing to take pay cuts. Even though we were very successful at rolling out EMV and are starting to see the reductions in card-present fraud associated with that technology, the story doesn’t end there. We have seen a lift of about 25% in card-not-present fraud post-rollout. This is an area with a direct correlation to the increase in online shopping, for example.

Credit unions need to understand the areas fraudsters are targeting and not rely on a single application to protect those areas. Since the Equifax breach, we have seen more aggressive attempts to take over accounts at the call center level. If a fraudster can get enough information from social media combined with credit information, it becomes much easier to commit fraud.

We are even seeing fraudsters target rewards and loyalty programs. Because members don’t typically monitor those accounts on a regular basis, criminals can gain access and cash out points without being noticed. It’s a new and growing type of theft.

We need to put security layers in place for all of these individual touch points, and we have to use the data to connect them. And we need to help address the lack of confidence members have when it comes to securing their data.

About the Author:

Chuck Fagan, III joined PSCU as CEO in April 2015. He has nearly three decades of experience in the credit union industry and was instrumental in helping pioneer PSCU’s role in bringing emerging payments technologies to credit unions.