



DISCUSSION PAPER

PAYMENT CARDS CENTER

Driving Positive Behavior Change Through Education and Motivation: Summary of a PayPerks Workshop

Susan Herbst-Murphy*

October 2013

***Summary:** Start-up firm PayPerks has developed a financial capability and rewards platform that combines online education with sweepstakes-based incentives. PayPerks' initial emphasis has been on improving the understanding and use of prepaid cards among individuals with little prior experience using payment cards. Participants can earn points in a variety of ways, including taking short, self-directed tutorials on prepaid card use. Every month, those points become chances to win cash prizes in sweepstakes drawings. PayPerks cofounders facilitated a Payment Cards Center workshop where they demonstrated their product and discussed the journey it took from raw idea to commercialization. Two significant new PayPerks partnerships were also announced during this workshop.*

Keywords: Financial literacy, prepaid cards, payroll cards, DoorwayS to Dreams Fund, unbanked, Direct Express, gamification

JEL Classification Numbers: D14, E42, C93

* Payment Cards Center, Federal Reserve Bank of Philadelphia, Ten Independence Mall, Philadelphia, PA 19106. E-mail: susan.herbst-murphy@phil.frb.org. The views expressed here are those of the author and do not necessarily reflect the views of the Federal Reserve Bank of Philadelphia or the Federal Reserve System. No statements here should be treated as legal advice. This paper is available free of charge at www.philadelphiafed.org/payment-cards-center/publications/discussion-papers/.

FEDERAL RESERVE BANK OF PHILADELPHIA

Ten Independence Mall, Philadelphia, PA 19106-1574 • (215) 574-7220 • www.philadelphiafed.org/payment-cards-center/

I. Introduction

In April 2013, the U.S. Department of Treasury, in conjunction with its Direct Express prepaid card offering, launched a financial capability program through PayPerks, a behavior change platform designed for low- and middle-income consumers. PayPerks provides online instruction designed to optimize consumers' use of general-purpose prepaid cards, a relatively new financial services product. PayPerks' patent-pending model uses sweepstakes-type incentives to encourage consumer completion of educational modules and brief post-module tests that measure what was learned, with the goal of influencing positive changes in financial behavior.

The Direct Express Card is a general-purpose prepaid card used to electronically distribute federal government benefits to individuals who had previously received paper checks in the mail.¹ Because this group includes many unbanked individuals who have limited experience in using financial services products, administrators of Direct Express saw a partnership with PayPerks as a means to provide self-directed prepaid card tutorials to Direct Express cardholders.

This partnership was announced some months before its April 2013 implementation, and the Payment Cards Center (PCC) had the honor of hosting the event where that announcement was made. In May 2012, the PCC held a workshop at which the cofounders of PayPerks, Arlyn Davich and Jake Peters, presented the concept, mission, and founding principles of their company. During that workshop, Walt Henderson, director of EFT Strategy Division at the

¹ For a discussion of the Direct Express program and why the SSA and the Department of the Treasury have partnered to adopt it as a means of electronic funds distribution, see "Testimony of Fiscal Assistant Secretary Richard Gregg before the Senate Special Committee on Aging," June 19, 2013, at www.treasury.gov/press-center/press-releases/pages/j11987.aspx.

Department of the Treasury, revealed that the Treasury, along with the Social Security Administration (SSA), would launch a PayPerks-supported financial capability program developed specifically for Direct Express cardholders.

This announcement followed one made earlier that month at a White House Summit on Financial Capability and Empowerment. At that event, MasterCard announced its intent to partner with PayPerks to make the PayPerks for Public Sector program an optional feature of MasterCard's federal, state, and local government prepaid card programs.²

What is PayPerks? What does the company do? What precipitated the PCC's invitation to PayPerks to conduct a workshop at the Federal Reserve Bank of Philadelphia? This paper, in addition to summarizing the workshop highlights, will answer these questions.

II. Workshop Background

PayPerks is a financial capability and rewards platform for the financially underserved population. It fuses online education with sweepstakes-type incentives to stimulate positive behavior changes among the target audience in their use of financial products. PayPerks' initial concentration has been on prepaid cards and educating cardholders to use them in ways that provide convenience and security, while keeping usage costs at a minimum.

The PCC's appreciation for such a concept was sparked during a conference on government use of the payment card system that it hosted in July 2011. The conference proceedings included discussion of the recent movement toward providing general-purpose

² "Commitments to Promote Financial Empowerment Across the Country," White House press release, May 10, 2012, www.whitehouse.gov/the-press-office/2012/05/10/commitments-promote-financial-empowerment-across-country.

prepaid cards to government benefits recipients who do not have a checking or savings account capable of receiving electronic direct deposits. These prepaid cards allow for electronic disbursement to otherwise unbanked individuals. Explicit benefits include savings to the government of more than \$1.00 per disbursement over a paper check and faster and more reliable delivery to the recipient. The federal government experience has “demonstrated that beneficiaries are 125 times more likely to have a problem with a paper check than with an electronic payment.”³

Not surprisingly, however, some obstacles surfaced when individuals who may never before have used a bank card were issued general-purpose prepaid cards. Some recipients were using the cards in ways that inflated the costs of supporting these programs. Imposing fees was the most commonly used technique to modify these behaviors.⁴ Conference speakers, notably Michael Barr of the University of Michigan Law School, appealed for alternate approaches that would use positive reinforcement to help bring these newly carded citizens along the payment card learning curve.⁵

So later that year, when accounts of a start-up company engaged in reward-based tutorials explicitly targeted to prepaid card use among the unbanked population began to appear, there

³ This quote is drawn from the testimony of Richard Gregg cited at footnote 1. In his testimony, Gregg also reported that fraud in the Direct Express prepaid card program is significantly lower than in the use of checks. Citing 2012 experience, Gregg reported that “more than 521,000 Social Security and SSI checks were reported lost or stolen and more than \$16 million in fraudulent check payments were made (while) there were 7,730 fraudulent Direct Express card enrollment attempts, of which a total of 2,966 were successful.” Related card dollar losses “totaled \$2.4 million with approximately \$1.5 million already recovered.”

⁴ A summary of the conference proceedings, which more fully captures both the benefits and challenges associated with using prepaid cards to disburse government benefits, is available at www.phil.frb.org/consumer-credit-and-payments/payment-cards-center/publications/conference-summaries/2012/C-2012-Government-Use-of-the-Payment-Card-System.pdf.

⁵ Professor Barr’s thoughts are summarized on pages 20 and 21 of the conference summary cited in the previous footnote.

was immediate interest in learning more. The PCC invited the company, PayPerks, to conduct a workshop at the Federal Reserve Bank of Philadelphia. PayPerks' cofounders Davich and Peters facilitated the workshop. Prior to full market implementation, they conducted pilot tests which demonstrated that PayPerks' educational modules increased knowledge and awareness of prepaid card utility, features, and costs, and this knowledge translated to changes in card usage. The pilot yielded both increased prepaid card adoption and greater use of cards to make purchases among those who already had cards.

Details of pilot test findings were presented during the workshop and will be discussed in Section V. C. The evolution of PayPerks is itself an interesting chronicle of innovation and entrepreneurship that will be covered in the next section.

III. The PayPerks Story

Prior to forming their company, Davich and Peters each had entrepreneurial ambitions and different but complementary skill sets — Davich's in business and marketing, Peters' in operations and technology. Neither was experienced in either financial services or consumer education. The PayPerks idea emerged from a disparate set of influences and insights.

Two major influences on Davich and Peters came in the form of research out of Harvard University. The first was the work of business school professor Michael Porter. Porter is known for his expertise in corporate strategy, but more recently, he has promulgated the “shared value” concept, which he defines as: “Policies and operating practices that enhance the competitiveness of a company while simultaneously advancing the economic and social conditions in the

communities in which it operates. Shared-value creation focuses on identifying and expanding the connections between societal and economic progress.”⁶

Davich and Peters became interested in the shared-value mission and sought a way to create a company that could achieve economic reward while simultaneously serving other needs and interests.

The two were also inspired by the research of Dr. Peter Tufano. While he served as senior associate dean of Harvard Business School, Tufano founded the DoorwayS to Dreams (D2D) Fund, a nonprofit organization that studies innovations in financial services for the underserved. One idea Tufano and D2D cultivated — prize-linked savings — made a distinct impression on Davich and Peters. Prize-linked savings applied the target group’s familiarity (as determined from D2D research) with sweepstakes and lotteries to savings goals that would better prepare members of the group to meet potential financial challenges.⁷ (The research had also found the target group to be inadequately prepared for financial emergencies and unplanned expenses.)

With these two guiding principles — the shared-value organization and sweepstakes-type incentives — in mind, Davich and Peters continued their research and found some compelling statistics:

- There are 60 million Americans living in a cash-based economy. They encounter certain direct costs, such as check-cashing fees and the cost of money orders, associated with

⁶ Michael E. Porter and Mark R. Kramer. “Creating Shared Value,” *Harvard Business Review*, January 2011, www.isc.hbs.edu/Creating_Shared_Value_HBR.htm.

⁷ See for example, “Consumer Demand for Prize-Linked Savings: A Preliminary Analysis,” by Peter Tufano, Nick Maynard, and Jan-Emmanuel De Neve; Working Paper 08-061, Harvard Business School (2008), <http://hbswk.hbs.edu/item/5867.html>.

being unbanked. Operating on a cash basis also comes with some inconvenience (paying bills in person, for example) and risk (possible loss or theft). As they conducted their research, Davich and Peters heard a similar narrative from a number of sources: An American earning around \$30,000 a year can save about a week's salary per year by using a prepaid card, with the caveat "as long as they use it the way they should."

- The pair learned that the type of prepaid cards being referred to, general-purpose reloadable (GPR), were still very early in their product life cycle and were yet to be widely adopted.⁸ They cited a 2009 Federal Deposit Insurance Corporation (FDIC) report that said the entire general-purpose reloadable prepaid category had only a 16 percent penetration rate.⁹
- Government and employers were (and still are) looking to these prepaid cards as a bridge to the unbanked for electronic funds distribution. Payors realize considerable cost savings when they can remit funds electronically rather than issuing paper checks.¹⁰ When the payee is unbanked, however, there is no deposit account to which they can make an electronic remittance. Prepaid cards are capable of receiving funds through the same automated clearinghouse process used for direct deposit.

Three factors seemed to create a business opportunity: This was a relatively new product, far from market saturation; the potential to deliver value for both parties to a payment

⁸ For example, Visa brought its payroll card to market in 2001. Its general-purpose reloadable prepaid card, which offers the same functionality as a payroll card but is sold directly to the public rather than provided through an employer or other intermediary, was introduced in 2003.

⁹ See "FDIC Survey of Banks' Efforts to Serve the Unbanked and Underbanked: Executive Summary of Findings and Recommendations," Federal Deposit Insurance Corporation, February 2009, and "FDIC National Survey of Unbanked and Underbanked Households," Federal Deposit Insurance Corporation, December 2009.

¹⁰ The Treasury Department's Financial Management Service calculates the cost to issue a check at \$1.05 and the cost to make an electronic deposit through the ACH at \$0.09, for a savings of \$0.96 per remittance done electronically. See "Government Prepaid Cards Lower Costs and Improve Access," Association of Government Accountants, Corporate Partner Advisory Group Research Series Report #34, June 2013.

transaction; and a need for educational marketing to optimize that. Three insights developed during their research helped Davich and Peters hone in on how they could apply their skills and experience to bring additional value into this mix.

1. Education was the primary barrier to adoption and usage of prepaid cards, particularly within the unbanked population that certain payors were trying to reach electronically. By definition, one who is unbanked will not have a debit card and, therefore, may be unfamiliar with how and where prepaid cards can be used.¹¹ For those without prior experience using precursors to prepaid cards (i.e., credit and debit cards), card-based transacting is a new and unfamiliar experience.
2. The unbanked population is largely comprised of lower-income individuals. D2D found disproportionate participation in games of chance among low- and middle-income individuals. Households with income under \$50,000 account for 80 percent of gambling revenue, and “38% of those with incomes below \$25,000 think that winning the lottery represents the most practical way for them to accumulate several hundred thousand dollars.”¹²
3. Contrary to the common belief at the time (c. 2009) when they were scanning the marketplace, Davich and Peters found that low- and middle-income individuals accessed

¹¹ An exception to this point may be the currently unbanked who may have had a checking account with a debit card in the past. This previously banked group, according to the Federal Reserve’s triennial Survey of Consumer Finances, accounted for more than half of the unbanked population in 2010. That survey found that of the 9.6 percent of American families without a checking account, 55.5 percent said they had held a checking account in the past. See “Changes in U.S. Family Finances from 2007 to 2010: Evidence from the Survey of Consumer Finances,” Jesse Bricker, Arthur B. Kennickell, Kevin B. Moore, and John Sabelhaus, the Federal Reserve Bulletin Vol. 98:2, June 2012.

¹² “Boosting Savings in Troubled Times: Harnessing Innovation,” a presentation by Peter Tufano, Harvard Business School, 2010. The presentation cites a 2006 Consumer Federation of America study as the source for the percentage of low-income individuals who consider the lottery as offering them the best chance of accumulating substantial cash assets.

the Internet at somewhat high rates. Analyzing data collected for a MasterCard-sponsored study, they learned that using either a computer (their own or a shared device) or a mobile phone, half of the unbanked and underbanked were online daily and at least 75 percent were online weekly.¹³

Synthesizing these influences, insights, and statistics, the vision for PayPerks began to take shape. To overcome the primary barrier to prepaid card adoption, an education component was necessary. Recognizing that “education is nothing without engagement” and that the target audience is incited by chances to win, Davich and Peters decided that the concept should also incorporate sweepstakes-type incentives to encourage people to participate. They also determined that everything needed to be delivered via the Internet through a web-enabled device.

With this rudimentary idea in mind, the work of validating and refining it, developing and testing a prototype, and making it commercially viable began. Davich and Peters admitted that early on, even those who were supportive of the concept in theory had questions: Could compelling curriculum be designed? Could it change behavior? Would the gaming aspect be legal in all 50 states?

IV. The Idea Takes Shape

A. Creating the “Winning Ticket”

The ability of games of chance to engage and retain interest seemed to be proven based on their endurance over time and their dispersion throughout culture and geography. Davich and

¹³ MasterCard produced a 2008 report from the findings of this study, “Financial Inclusion Report: Computer Usage/Internet Access, Cell Phone Usage, and Study Demographics.”

Peters reported historical evidence for their existence dating back to the Han Dynasty. References to lotteries can be found in the Old Testament of the Bible and in Greek mythology. The emperors of ancient Rome adopted lotteries, with the spread of the Roman Empire across Europe also introducing lotteries to new regions.¹⁴ A lottery established in the Netherlands in 1726 remains the oldest in continued operation.

From Europe, the lotteries spread to the American colonies; in fact, several of the Founding Fathers had links to lotteries. Colonial-era schools, churches, and colleges, including Harvard, Yale, and Columbia universities, were financed by lottery revenues.¹⁵ As of 2012, according to Wikipedia, 44 U.S. states and territories operated government-sponsored lotteries.

Lotteries generated \$60 billion in sales in 2008. They are so popular in America that, according to D2D, annual expenditures average \$200 for every man, woman, and child in the country, or \$515 at the household level. Since these calculations include nonparticipating individuals and households, the outlay is even higher for frequent players. The lottery distribution network includes 200,000 retailers, many in poorer communities.¹⁶

D2D research found that among the economically challenged, the lottery provides both a form of entertainment and hopes for a better life. Recognizing the significance of these two motivations, D2D embraced the lottery concept as a way to increase the odds of the latter

¹⁴ Gerald Willmann. "The History of Lotteries," Stanford University Department of Economics, August 1999, willmann.com/~gerald/history.pdf.

¹⁵ The North American Association of State and Provincial Lotteries (NASPL) website provides these examples of early American use of lotteries: by George Washington for a westward-expanding road from Virginia, by Benjamin Franklin for Revolutionary War artillery, and by John Hancock to rebuild Faneuil Hall in Boston. See "Lottery History" at www.naspl.org/index.cfm?fuseaction=content&MenuID=11&PageID=1016.

¹⁶ A study in Chicago found that of the 10 zip codes with the highest lottery sales over a six-year timeframe, eight had unemployment rates higher than the citywide average of 10 percent, and all 10 had average incomes of less than \$20,000 per year. See "Illinois Lottery: The Poor Play More," by Leah Samuel, *The Chicago Reporter*, September 24, 2007.

(through prize-linked savings initiatives) while leveraging the enthusiasm provided by the former.

The PayPerks entrepreneurs took that reasoning and sought to apply it to cardholder education. They also considered how elements of the credit-card rewards model could be adapted for their purposes. These rewards programs typically allow accrual of points based on dollars spent, with points redeemable for airline tickets, merchandise, gift cards, etc. They have proven to be very popular, especially within a segment of credit cardholders that is demographically different than the population PayPerks was targeting. As a result, there were several areas where Davich and Peters identified misalignment between the credit-card rewards model and the PayPerks concept:

1. Awarding points for dollars spent creates perverse incentives for users with limited money to spend.
2. Lower-income household spending is insufficient to optimize reward value of these programs.
3. This demographic prefers cash to free airline tickets.
4. The business case for prepaid rewards differs from that for credit cards, for which interest revenue, annual fees, lower charge-offs, and increased account retention help defray program costs.
5. While the “points for dollars” model had successfully influenced individuals to concentrate spending on a specific card (known as “single-homing” by economists), it was unproven as a method for changing other behaviors.

How could the features of credit-card reward programs and lotteries be modified to increase financial capability? Davich and Peters determined that rather than having points redeemable for airline tickets or merchandise, each point earned should be an entry in a monthly sweepstakes for cash prizes. Prizes, it was decided, should be large enough to encourage activity but small enough so that there could be many winners, thereby increasing the odds of receiving a prize. And, rather than earning one entry per dollar spent, participants would earn by participating in consumer education and by showing the application of their newly acquired knowledge.

B. Executing the Idea

If there were to be prize money, it would need to come from a source that also had something to gain from moving prepaid cardholders along the learning curve. Were there cardholder behaviors that, subject to change, could improve the experience for both prepaid card purveyors and their customers? Where was lack of knowledge a factor in cardholder behavior? If education could change behaviors, what learning tools were optimal in capturing interest and in achieving results?

1. Finding Win-Win Content

Friction can result when prepaid cards are distributed to previously unbanked citizens. Individuals with little or no experience using banking products are unlikely to become proficient card users without some instruction. As it happened, untutored use by these individuals was creating avoidable costs for themselves and their card issuers. Fearful about having their funds held by a third party, many novice cardholders cash out immediately each month by taking the entire amount as a cash withdrawal. This requires them to continue to operate in a cash economy

(minus check-cashing fees) and deprives the issuer of merchant-paid revenues received when a card is used to make purchases.

Cardholders who use out-of-network ATMs incur costs for themselves and for their issuers (from fees imposed on them by the ATM owners for providing service to the issuers' cardholders).¹⁷ Unfamiliar with maintaining checkbook balances, many first-time account owners initiate live-operator customer service interactions whenever they want to know the amount of funds they have available or to find out when new deposits are credited. This way of keeping track of one's prepaid card balance also drives up costs to the provider.¹⁸ Providers often assess fees for these cost-incurring behaviors. While imposing costs is a recognized way of modifying behavior, these fees can irritate customers and precipitate criticism.

For people who are unfamiliar with payment card use, Davich and Peters found that there were many opportunities to improve cardholder knowledge: getting cash back when making POS purchases, the differences between signature and personal identification number (PIN) purchases, setting up recurring payments, and using a card to shop on the Internet. They also recognized that improving customer knowledge could benefit financial institutions and program managers. There seemed to be many learning areas around which they could develop content, but what form should that content take?

¹⁷ For a report prepared for Congress, the Federal Reserve Board gathered revenue and expense information on more than 200 public-sector prepaid card programs and found that, in 2012, the 14 prepaid card issuers that were surveyed paid more than \$160 million in fees to ATM operators and cash advance merchants for providing cash services to the issuers' cardholders. See "Report to the Congress on Government-Administered, General-Use Prepaid Cards," the Board of Governors of the Federal Reserve System, July 2013.

¹⁸ The average cost of a live-operator customer service interaction is more than 20 times more expensive than an automated response unit interaction, according to a *CBS News* report, "Call Centers: Putting Customer Service on Hold," which aired on July 3, 2011. That segment reported the cost of the former as \$7.50 and the latter as \$0.35.

2. Connecting with the Audience

The pair began developing curriculum prototypes in a lab setting. With a background in marketing, Davich decided to employ several research tools, including one-on-one structured interviews, product demonstrations, and focus groups, to obtain feedback on these early designs. Their New York City-based headquarters provided Davich and Peters with access to a diverse set of test users. Through an iterative process of developing, testing, and incorporating feedback into revised design and retesting, they came up with a modular curriculum with each module designed to take no more than 1.5 minutes to complete. They tested styles ranging from humorous to serious and found that the test groups responded well to funny components, including cartoon-like characters. Their assumption prior to testing was that the use of humor applied to financial services might diminish trust in the curriculum. Instead, they learned that audiences found it engaging.

But was it effective? They determined this by testing audiences before and after they completed educational modules. Their early efforts focused on payroll cards, and they found very low awareness of the product in pretesting. Because of low awareness, when asked about their interest in obtaining a payroll card, respondents scored frequently in the 2–3 range on a 10-point scale. But after completing 10–12 modules, their average level of interest increased to a score of 9. At the end of one focus group, eight out of 10 participants asked how they could obtain a payroll card.

The test groups were also asked to give their impressions of the education modules. One question asked participants to describe PayPerks in one word. The developers expected to hear “educational,” but they were pleased and surprised that the words “easy” and “fun” came up as

often as “educational.” They felt they had met their goal of creating an engaging way of providing educational content.

3. Making It Legal

The final hurdle was legality. Legal research revealed that private (nongovernment sponsored) lotteries are illegal in all states, but definitions are important. Three characteristics distinguish a lottery: A prize is awarded, there is an element of chance in awarding prizes, and something of value (money or time) is exchanged in consideration for a chance to win. To turn a lottery into a sweepstakes and be legal in all 50 states, one of these elements had to be eliminated.

The idea that PayPerks participants would complete educational modules in order to qualify to win prizes constituted “consideration” and would have made the original concept an illegal lottery. To eliminate the “consideration” attribute, there had to be an equivalent of “no purchase necessary.” To allow for this, a person may submit his or her name for an opportunity to win prizes without participating in any of the activity that otherwise earns participants a sweepstakes entry. By law, those nonparticipant entries have to be weighed equally with those who earned their chances to win. By avoiding consideration for playing, the PayPerks sweepstakes idea would no longer run afoul of state gaming laws.

The founders had taken their basic idea and developed educational content and a platform for delivering it. They had identified a target market and conducted marketing research. They had designed a revenue model premised on the expectation that card issuers and program managers would be willing to shoulder the cost in order to achieve the outcomes asserted by

PayPerks: increased card adoption, extended cardholder retention, improvement in desired usage, and decreased customer service and other costs. They were now ready to seek a partner willing to help support a pilot.

V. Learning in Live Mode

The young company approached MasterCard to ask for help in finding prospective partners that would be willing to test market PayPerks. MasterCard connected PayPerks with two large employers, Omni Hotels and Medical Staffing Network, and the program manager who operated both of the companies' payroll card programs. Each company had a payroll card program that was about two years old, and both programs had come to a near standstill in new sign-ups. For already carded employees, use of the cards at the POS was not growing.

A. A Payroll Card Pilot

Payroll cards are general-purpose reloadable prepaid cards designed as a means to electronically distribute payroll, especially to those employees who do not have a bank account to which their pay can be directly deposited.¹⁹ The two pilot companies had a combined total of 8,000 unbanked and underbanked employees distributed across 150 pay locations throughout the country. With this population, PayPerks had an opportunity to test actual response and behavior to add to the research that had been done in lab settings.

¹⁹ While payroll cards were designed chiefly for the unbanked, it should be noted that there are banked individuals who prefer not to have their payroll direct-deposited to their bank account. There are also individuals (this author included) who have both a payroll card and a demand deposit account (or multiples thereof), with direct deposit of salary divided among these accounts according to specifications established by the individual. The two points to be understood here are that 1) individuals receiving their salary by check are not necessarily unbanked, and 2) for some, payroll cards (and other prepaid cards) are used *instead of* a traditional bank account. For others, prepaid cards are used *in addition to* traditional bank accounts.

To engage these 8,000 people in the PayPerks program, PayPerks marketing materials, designed to resemble scratch-off sweepstakes tickets, were included in pay envelopes. The scratchers, printed in English and Spanish and including an activation code, directed the pilot's target audience to log-in to the PayPerks website, which is accessible by computer or mobile device. When people did so, they earned chances to win monthly cash prizes. (The appendix to this workshop summary graphically represents this onboarding process.)

The pilot employed two different curricula targeted to two separate audiences: those who already had adopted payroll cards and those who had not. The former group was educated in how to make better use of their cards. Those still receiving paper checks were educated about payroll cards — what they are and how they can be useful to the cardholder — and were encouraged to sign up for their employer's payroll card.

The pilot ran for 10 weeks during the spring of 2011. During that time, the number of cardholders doubled the total that had signed up in the prior two years that the payroll card had been available at these two companies. In fact, PayPerks reported that approximately 20 percent of that target group signed up for PayPerks accounts without any repetition of the message, a rate dramatically higher than the low-single-digit rates usually generated from direct marketing.²⁰

For employees who already had cards, exposure to the PayPerks educational modules increased usage for POS transactions by four times, from 0.8 transactions per week before the

²⁰ In 2012, the Direct Marketing Association (DMA) reported a 3.4 percent response rate for “letter-sized direct mail to a house list” and a 1.28 percent rate for a prospect list. E-mail solicitations achieve an even lower response rate (less than 1 percent), according to the DMA. (See “2012 DMA Response Rate Report: Direct Mail Shows Well-Rounded Performance,” by Debora Haskel, July 11, 2012, www.iwco.com.) The response rate to credit card direct mail offers has been tracked for many years by Synovate (formerly BAI) Mail Monitor. Since 2000, the rate has consistently hovered at around one-half of 1 percent.

pilot to 3.8 after its conclusion.²¹ The messages directed to this group instructed them on how to use the card at POS with a PIN or signature authentication. They were advised about the kinds of merchants that are likely to allow cash back with purchases and were instructed in using that method for cash access as an alternative to ATM withdrawals.

PayPerks learned that its efforts to create engaging material were successful. The average time people spent on the site was 12 minutes. By comparison, Google Analytics reported that the average time spent on a website was 5.23 minutes during a four-month period from late 2010 to early 2011, less than the average 5.49 minutes in 2009.²² Facebook users spend less than eight minutes on average on the social media website.²³

In addition to the average website session time, the fact that half of the pilot participants completed all educational modules by five weeks into the 10-week pilot provided positive indications that the content was engaging. This experience also taught the fledgling company that new modules always have to be in the pipeline in order to sustain the momentum.

The curriculum uses an illustrated, text-light format with characters and whimsical touches to capture attention and increase retention. Each lesson is short in order to make

²¹ This usage is more than double the average seven POS transactions per month done on general-purpose reloadable prepaid cards as determined from statistics gathered in response to a major industry survey. The 2013 Debit Issuer Study, commissioned by the PULSE network, surveyed 64 banks and credit unions that collectively account for 45 percent of total U.S. debit (including prepaid) transactions. The survey was fielded in February and March 2013. More than one-third of these issuers offered a general-purpose reloadable prepaid card. Based on 2012 usage, the average number of POS transactions per card per month was seven.

²² “Google Analytics Report Shows People Are Spending Less Time on Websites,” Allyson Kapin, July 2, 2011, www.frogloop.com.

²³ Nielsen Netview monitoring system found an average visit time of 7 minutes, 45 seconds for U.S. Facebook users during August 2011, the highest average session time among the 10 most frequently visited websites, which included Google, Yahoo, Apple, and Wikipedia. See “August 2011 – Top US Web Brands, September 30, 2011,” www.nielsen.com.

education approachable. Each screen includes one large picture and a single line of text. The images are designed to visually communicate content for those whose reading skills are limited.

B. How PayPerks Works

At the PCC workshop, Davich and Peters presented a computer demonstration of the PayPerks content.²⁴ The workshop simulation demonstrated prompts for a new visitor to enter a name, e-mail address, and a password. After entering those three pieces of information, the visitor is then a PayPerks “member.” Subsequent questions ask for the person’s language preference and employer name so that the member’s payroll card can be linked to the membership so that usage points can accrue. The new member immediately sees three things: the number of points available for the next sweepstakes, the number of days until the next sweepstakes and the maximum prize amount, and advice that additional entry points can be earned by taking more courses.

After completing each module, participants are asked two questions. If a question is answered incorrectly, the member is given feedback explaining why the answer was wrong. A retest can be taken at any time.

People are awarded points for completing modules, for correctly answering questions about what they learned from the modules, and for demonstrating behavior that was learned in the modules. Points are awarded for having pay loaded onto the card, for using the card to make five purchases in one week (no matter how small since the goal is to encourage use, not

²⁴ Interested readers can view content at the PayPerks website (www.payperks.com). Anyone can create a PayPerks account, but those who do not have cards issued by or through a PayPerks partner will have a more limited site experience.

overspending), for referring a friend to the PayPerks educational website, and for using the card at a gas pump (after completing the module explaining how to do that). Points can also be earned by participating in surveys designed to get demographic and attitudinal information (e.g., marital status, feelings about one's finances) that allow for segmentation analysis.

Points are entered into monthly cash drawings. With the aim of extending the winnings to many people, members are limited to only one prize per sweepstakes, and prize amounts are kept somewhat small. During the pilot, the top cash award level was \$1,000 with additional prizes of \$500, \$50, and \$10. Awards are delivered as a credit to the member's prepaid card. The goal, said Peters, is to have all members feel like they are winners. He anticipates that PayPerks will be able to reinforce this goal by adding additional, smaller-denomination prizes in the future. Because the expense of prize distribution is minimal, more numerous awards, even at low dollar levels, can be cost-effective.²⁵

The team is also considering using points for a subsequent sweepstakes as another prize form. After each monthly sweepstakes, members' point balances are reset to zero. Awarding points is one means of sustaining member engagement. PayPerks knows that it will have to continually develop new opportunities for members to earn sweepstakes entries. Some of their plans for the future are covered in Section VI.B.

²⁵ Applying the comparative payment costs identified by the Treasury Department (footnote 10) the cost of paying out an award electronically to a prepaid card is about 1/12th the cost of paying winnings by check. With the introduction of its program to Direct Express cardholders, PayPerks has introduced prizes as low as \$1.00, a value point at which the economics could not be supported if rewards were distributed by check, since the cost to issue a check would be greater than the award amount.

C. What Was Learned in the Pilot

PayPerks learned that the scratchers they used to first capture the interest of their target audience did resonate. They also learned that the target market has access to the Internet. The team estimated that 70 percent of the target population had regular Internet access.

Another important, but accidental, discovery was the importance of viral marketing. When a second round of scratchers was sent out to a small group of workers, a number of people who initially passed on the program subsequently enrolled after receiving the second offer. When asked why people did not act on the first offer but did on the second, PayPerks learned that some employees were dubious the first time around but then heard good reports about the program from their early adopter coworkers. This positive word-of-mouth encouraged workers to take action when given another chance to do so.²⁶ From this, PayPerks learned that repeatedly proffering the scratchers can have a positive effect on elevating the overall response rate.

Nearly one-third of pilot participants completed surveys. They showed a willingness to self-report certain personal information, including gender and income, through survey responses.²⁷ The subgroup of the pilot participants who provided demographic information was not sizable enough to provide anything more than directional information with regard to whether and how participation and behavior breaks down by age and income level. From this limited

²⁶ This experience is consistent with findings from the product development and adoption literature related to the influence of known and trusted individuals on new product adoption. Interested readers can access accumulated research at the Product Development and Management Association (PDMA) website: <http://www.pdma.org/p/cm/ld/fid=49>.

²⁷ As part of PayPerks' enrollment process, users read and agree to a privacy policy that guarantees that no personally identifiable data collected in surveys are shared with any third party without the user's consent. The privacy policy used during the pilot allowed PayPerks to share aggregate data that did not include personally identifying information.

sample, however, no obvious differences were observed across age and geography. PayPerks learned, for example, that forgetting passwords was consistent across all age groups.

The pilot exceeded the expectations that existed at the outset. This experience caused the PayPerks team to think about prepaid cards less as merely a piece of plastic and more broadly as an account to which other financial services and behavior could be linked. It was clear that PayPerks would need to seed its platform with additional curricula anyway, so Davich and Peters expanded their concept to include general financial literacy. They began creating new content to reflect this larger undertaking.

VI. Moving from Pilot to Full Implementation

The public-sector partnership with MasterCard (mentioned in the introduction of this summary) was a significant development for PayPerks. Through this partnership, PayPerks' curriculum became an available option for any government-sponsored prepaid card program that uses the MasterCard brand. This provided entree to numerous programs in the public sector, a sector that had been strategically targeted by PayPerks.

A. Gaining Critical Mass in the Public Sector

Government-sponsored prepaid programs provide unparalleled potential to quickly achieve critical mass. Because these programs reach large numbers of people, they are key to reaching economies of scale, both operationally and experientially. The primary value is in delivering the educational content to large population pools. Secondly, this channels more quantifiable experience into the feedback loop, which in turn enables finer analysis that can be used in further content customization, targeting, and delivery.

Customization is essential as PayPerks expands into different programs and sectors. Its partnership with the SSA's Direct Express program illustrates this point. After announcing this partnership at the PCC workshop, the Treasury Department's Walt Henderson went on to explain that Direct Express' implementation of PayPerks requires prize award levels that are lower than those that PayPerks might offer elsewhere. Making this adjustment was necessary to avoid any risk of prize money affecting clients' benefits eligibility status. Because there is flexibility in PayPerks' platform design, a modified award structure could be accommodated.

Henderson acknowledged that because of the priorities placed on ramping up the Direct Express program to comply with statutory deadlines to eliminate the use of paper checks, cardholder education may not have received sufficient attention. PayPerks will redress this. He also recognizes that the mandatory nature of Direct Express has been met with a response among some cardholders to immediately withdraw their entire remittance in cash each month. For some, this involves a trip to an ATM, sometimes in an unsafe area, sometimes just after midnight on the payment date. Direct Express managers hope that PayPerks will help recipients use their cards more wisely, make them more comfortable using their cards at a POS and to pay bills, and familiarize them with obtaining cash back with purchases.

Another partnership with PayPerks was also revealed at the PCC workshop. Roger Kidwell, representing Xerox, announced his company's partnership with PayPerks. Xerox functions as the program manager for many state prepaid card distribution programs. Through cardholder research, Xerox learned that other prepaid card products advertised and available in the marketplace are creating confusion for holders of these state programs' cards. One area where Xerox intends to customize PayPerks' content is the pricing that applies to the specific

card held by a client of a Xerox-affiliated program. Kidwell said Xerox also wants to educate cardholders “right out of the gate” on how the card works and how to use it to maximize utility and minimize fees. Cardholders need to know that there is no charge to use the card at a POS and that the merchant cannot require a minimum purchase amount as a condition of card use.

Some of these areas of confusion have been identified through research done by Comerica, the bank that issues the Direct Express card. In partnership with Xerox, Comerica is also the issuer for a number of state prepaid card programs. At the workshop, Comerica’s director of government electronic solutions, Nora Arpin, said that her company, in conjunction with MasterCard and Walt Henderson’s team at the Treasury, has fielded four surveys to ascertain user satisfaction levels. While the surveys have found high rates of satisfaction overall, they also identified areas where cardholder knowledge could be improved. For example, there was relatively low awareness that Direct Express cards afford Regulation E protection and chargeback rights under MasterCard network rules.

This identified need for continual education was a major contributing factor in the decision to partner with PayPerks. Arpin said that Comerica and its partners expect that exposure to useful information, along with actual experience, will provide cardholders with the confidence that their money will be there when they need it and that there is no need to immediately withdraw the funds.

Through its affiliations with these public-sector programs, PayPerks is privy to the knowledge and the research findings that are coming out of the experience with these leading-edge programs. This has reinforced for PayPerks its decision to place initial emphasis on the public sector. Its future plans, however, will expand the focus to other sectors and other products.

B. Future Vision

PayPerks wants to apply the concept originally conceived for payroll cards to all payment products geared toward low- and middle-income consumers. As it is in the public sector, PayPerks is exploring opportunities with a number of private-sector partners that can provide scale without sacrificing flexibility. PayPerks is also interested in working with social impact organizations. Davich explained that these entities have content expertise and insight into specific demographic markets. What they may not have is the ability to distribute education and track its impact in a scalable way. Since these are skills that PayPerks does have, there could be some effective synergies in applying combined expertise to improving consumer financial literacy.

PayPerks intends to leverage its platform to develop educational modules to improve the use of other products and services used by low- to moderate-income (LMI) households. This might include payday loans or cross-border remittances.²⁸ Other potential curriculum topics could include budgeting, saving, scenario planning for future spending, and asset building. The workshop presenters said there are 2.5 billion citizens around the world who are unbanked, while global use of Internet-connected devices is on an upward trajectory. They view this as a large opportunity for financial literacy education that is delivered through an online platform.

PayPerks also wants to build opportunity around the data they compile. In addition to what they can measure through their platform — the number of module completions and retention of education based on post-tests — survey responses offer another source of

²⁸ Payday loans are short-term loans made to employed individuals who agree to repay the funds when they receive a future paycheck. Cross-border remittances, funds sent out of the United States to recipients in other countries, are frequently used by immigrants and foreign nationals to send money to relatives still living in their country of origin.

information for the company. Responsible sharing of anonymized aggregate information is something the company is studying. They know they have to proceed in a careful and considered way so that personal information and privacy are protected. They recognize that they would need to obtain member agreement to share compiled information. All of this has yet to be determined, but PayPerks recognizes that its ability to collect information has the potential to create value. Marketing purposes immediately come to mind, but there could also be other applications. By way of example, Davich described a hypothetical scenario of how their surveys might be used by regulatory authorities to gauge how a change in public policy is being perceived and absorbed in the marketplace.

VII. Conclusion

In the months since PayPerks facilitated its workshop at the PCC, a lot has happened. Early experience of the partnership with Direct Express was reported in a June 2013 Paybefore.com blog. Within weeks of launching the PayPerks curriculum, 50,000 Direct Express cardholders enrolled and completed nearly 300,000 education modules.²⁹

In addition to its partnership with Direct Express, PayPerks is working with several other program managers in the prepaid market. These partnerships have yet to be announced publicly. The company's innovative concept has also been featured in press accounts, and the company has received awards and recognition.

Gamification, one of the fundamental concepts that inspired the PayPerks idea, is beginning to get notice from others. In June 2013, *American Banker* hosted a webinar on

²⁹ Andrew Gillen. "Driving Financial Capability in the U.S.: PayPerks and Direct Express," Paybefore.com, June 2013.

“Gamification in Financial Services.” A director from D2D was one of the facilitators of that session, which covered ways for financial services providers to incorporate gamification into their consumer education and marketing practices. Weeks later, gamification was featured in a blog article on the Paybefore website.³⁰

Deficiencies in consumer financial literacy, and in efforts to remedy those deficiencies, are broadly recognized. Perhaps gamification will be an effective tool to apply to this condition. Solutions developed by PayPerks, based on a concentrated effort to understand the problems facing both consumers and providers of financial products and also on employing prize-based incentives, have been recognized as innovative and empowering. Additionally, its model incorporates both post-lesson testing and the ability to observe subsequent changes in usage patterns. One of the constraints on certain other financial literacy endeavors has been the inability to evaluate the effects of these endeavors. With PayPerks, content delivery, measurement of comprehension, and assessment of behavioral changes all share a platform with an incentives program. This linkage allows for the observation of the role of both education and incentives in advancing financial capability. The Payment Cards Center will watch developments in this area with interest.

³⁰ Michael Hemsey. “It’s ‘Game On’ Time for Loyalty Marketers: Learning the Rules of Gamification to Drive Engagement,” Paybefore.com, July 2013.