Financial Health Can Be So... Retro

Some of the best new digital FinHealth solutions
Borrow a page from the era of paper banking
The Financial Health Network is the leading authority on financial health. We are a trusted resource for business leaders, policymakers, and innovators united in a mission to improve the financial health of their customers, employees, and communities. Through research, advisory services, measurement tools, and opportunities for cross-sector collaboration, we advance awareness, understanding, and proven best practices in support of improved financial health for all.

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INTRODUCTION
The New Banking Apps Are So... Retro

Banks and credit unions looking to help customers build their financial health face two vexing hurdles.

ONE IS A CATCH-22:
It's hard to know which solutions work and which ones consumers will readily adopt; but without products already in the market and user outcomes to measure, it’s hard to know where to look for evidence.

THE OTHER IS AN INCENTIVES PROBLEM:
In the free checking era, banks now earn a preponderance of deposit revenues from debit card spending (interchange) and from overdraft and non-sufficient funds fees, a burden that falls most heavily on consumers who struggle to pay their bills at the ends of the month.1 Helping these customers better manage spending and maintain positive balances means losing revenue.

Fortunately, fintech innovators have begun to address both of these challenges, providing evidence that some digital tools for fostering and maintaining financial health actually work.

1 "The Ends of the Month Blog Series." Financial Health Network.
One encouraging piece of evidence that the new finhealth apps work is that users are willing to pay for them.

With access to consumers’ account data, new non-bank ventures can build and test new apps that provide daily decision guidelines, transaction services, and self-selected guardrails that sit on top of consumers’ existing banking relationships – and they can do it at a relatively low cost. But because these fintechs don’t make money from underlying account activity (such as debit card spending or overdrafts), many charge for monthly subscriptions, which their customers are willing to pay for the value these tools provide.

Additional proof of what works lies in the past: Many of the fastest-growing digital services mimic informal systems and habits that prior generations of consumers used to manage their own financial behaviors.

At the Financial Health Network, we and our research partners have encountered many of these informal systems through interviews and focus groups and through our Financial Diaries project. Families have readily shared the tricks and habits they use to manage their own spending, saving, and borrowing. For example, some consumers leave their credit or debit cards in their dresser drawers to make sure they only spend the cash they are carrying with them. Others set up special savings accounts and manually transfer portions of their monthly rent or mortgage payments when they receive each bi-weekly paycheck, thereby ensuring they won’t be tempted to spend these set-aside funds before the bills come due. Still others stash cash for emergencies in hidden places (a block of ice in the freezer, their mother-in-law’s safe deposit box, the proverbial mattress) that are out of sight and out of mind.

Many of the informal money management practices that pre-date modern electronic banking grew out of previous generations’ experiences of war, economic depression, migration and hardship. These habits selectively impose friction that protects set-aside funds from the inevitable impulse to spend them. They also help individuals make and keep commitments to their families and to their future selves.

Indeed, some of the most promising fintech apps replicate these old behaviors and habits in digital form. So we’ve begun calling them financial retronovations.

Retronovations n.
The conscious process of mining the past to produce methods, ideas, or products which seem novel to the modern mind.

The fact that tens of millions of consumers are adopting these retronovations to manage their daily financial lives—and paying for them—bodes well for banks and credit unions that want to integrate them into their basic checking and savings account offerings to generate a new stream of revenue aligned with improving consumer financial health.

This paper highlights four of the retronovations.
RETRONOVATION ONE:
Earmarking Income

One effective way to avoid running out of money at the end of the month is to set aside or “earmark” money as it comes in for bills you know you’ll need to pay.

ANTECEDENTS

For over a century, the U.S. military has helped service members adopt this financial discipline using a system of payroll deductions – called “allotments.” Allotments help young soldiers reliably use their pay to meet their families’ most important financial obligations. Payments for rent or mortgages, insurance policies, car loans, and savings plans to which a service member has committed are automatically paid directly by the Defense Department. The service member’s bank account receives deposits that are reduced by the amounts “allotted” to meet those obligations, and each reduced deposit leaves a more accurate picture of remaining discretionary income.

Civilian families once maintained similar systems. Many wage-earners brought weekly paychecks home to their spouses (mostly wives) to take charge of the money. She would cash the checks and allocate the cash proceeds to paper envelopes created for each recurring expense (e.g., mortgage payment, car payment, utilities, groceries, gasoline, etc.). What was left over was divvied up between savings and allowances for discretionary expenses. The system kept families from spending pay that needed to be set aside for the big bills that came due each month. Making it work required a high degree of family coordination, trust, and self-discipline.

Formal financial education classes have long advocated similar systems to budget income for recurring bills and necessities. But these systems haven’t translated well from the earlier generations’ world of cash and checks to today’s world of electronic payments. Cards and e-wallets did away with the inconvenience of cash, and they fostered the explosive growth of electronic commerce. But they made earmarking income for recurring expenses more difficult, as has the increasing unpredictability of household earnings.
RETRONOVATION ONE:
Earmarking Income

DIGITAL VERSIONS

Some fintechs have now revived earmarking by offering the old envelope system in digital form. Several years ago, challenger bank Simple (now part of BBVA Compass Bank) introduced an automatic savings feature to its basic checking account called “Goals.” It enabled users to set money aside for large, one-time expenditures, such as a major purchase, a tuition payment, or a down payment on a car. Money earmarked from income for these one-time spending goals was excluded automatically from the account holders’ “safe-to-spend” balance.

A large share of Simple users enrolled in Goals, but the company was surprised to see that most were using the feature for recurring monthly obligations such as rent, rather than for big, one-time payments. Most of the customers were paid biweekly or semi-monthly, and Goals created a way for customers to earmark portions of their paychecks for bills they knew they would need to pay in the weeks ahead.

Simple has since added a modified feature it calls “Expenses” that is explicitly designed to earmark portions of income for recurring bills. Digit, an automated savings app, has introduced a similar feature. Finicity, the data aggregator, has been offering its “Mvelopes” service directly to consumers for well over a decade, and EarnUp enables consumers to earmark portions of their income to pay off debts faster.

Debit cards and then digital wallets made it easier for consumers to pursue instant gratification with all their liquid assets at their disposal. Now, many are using digital envelopes to cordon off funds they know they’ll need for recurring expenses, shielding their future selves from their impulsive present ones.

<table>
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<tr>
<th>DIGITAL VERSIONS</th>
<th>ACCOMPANYING FEATURES</th>
<th>FEES</th>
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<tr>
<td>EarnUp</td>
<td>Intelligently diverts portions of income toward loan payments in order to pay down debt faster and save users interest</td>
<td>Free for those who have loans with EarnUp's partners; $9.95/month for others</td>
</tr>
<tr>
<td>Mvelopes</td>
<td>Savings envelopes, auto-transaction importing and account balance monitoring, access to learning center, debt reduction center, debt assessment, and initial setup assistance</td>
<td>Basic: $6/month Plus: $19/month Complete: $59/month</td>
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<tr>
<td>Digit</td>
<td>Automated savings, unlimited goals, automated debt payments, overdraft prevention, 1% savings bonus, unlimited withdrawals, overdraft reimbursement</td>
<td>$5/month, no account minimums</td>
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It was once common practice for consumers to keep a manual record of their checks and cash withdrawals in a paper check register that kept tabs on their remaining funds. The running balance at the bottom right—plus the cash in their wallet—was their real-time “safe to spend” amount. **But over the years, balancing and reconciling a checkbook has become a forgotten art.**

You can partly blame technological conveniences: first ATMs, then bank-by-phone, then online banking, and now mobile banking all provided ample ways for us to check our “available balance.”

But complexity is also to blame. Consumers who use their debit cards instead of cash are likely making dozens of small electronic withdrawals from their accounts each month, and few take time to note down these frequent card swipes in their checkbooks. Plus, since few consumers record checks they’ve used to make bill payments and many now auto-debit their accounts for certain recurring bills, they must rely solely on mental accounting and memory to accurately judge when these payments will post to their accounts and how much of the available balance figure displayed on their phones can actually be tapped for discretionary spending. When they miscalculate, or simply forget which payments are pending, overdrafts result.

As a way to keep on top of what’s safe to spend, tracking a bank account’s “available balance” works reasonably well for consumers who are able to keep extra dollops of cash in their accounts. But for consumers whose balances get low each month – those living paycheck to paycheck, or those who purposely keep their checking balances low as a way to discipline spending – using only their mobile banking app to track available funds is like flying in the dark. This problem is likely to persist until our routine payments clear in real time, a development that isn't likely for another decade.
Imagine going to your smartphone to view your checking balance and seeing two numbers instead of one. The first number is the traditional available balance. The second is an estimate that projects what your balance will be two days, three days, or a week from now. It accounts for the typical differences between authorization and settlement amounts of still-pending debit card transactions. But it also anticipates and deducts regular auto-debits when the app forecasts they will shortly post to your account. It might even account for paper checks you’ve scanned before putting them in the mail, and when to expect your regular salary deposit if that arrives on particular days of the week or month.

What we’re describing are simple applications of machine learning that essentially replicate the old practice of keeping a check register. Not all of the features exist yet, but pieces of it do. Apps that predict pre-authorized debits and deduct them from “safe to spend,” are available through fintechs such as Douugh, Empower, Personetics (UK), Tuesday (UK), Pocketsmith, Varo Money, and Bank of America’s personal financial assistant, “Erica.”

These apps are only as accurate or timely as the information fed to them. But tap on the estimated balance number, and they will at least show you the math for how they’ve estimated which bills are likely to be debited from an account and when. They’re not perfect substitutes for the paper check register, but – as the term “machine learning” implies – these apps are perpetually refining themselves.

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<td><strong>Douugh</strong></td>
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<td><strong>Pocketsmith</strong></td>
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<td><strong>Bank of America’s ‘Erica’</strong></td>
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ANTECEDENTS

The Sears Catalog was the Amazon of its time, containing just about everything one might want. In its heyday, the “Wishbook” listed each large-ticket item, such as an appliance or furniture, with a monthly payment amount, since many customers needed or wanted to pay for their purchases over time. Beginning in 1892, their catalog and sister department stores made Sears Credit one of the country’s biggest installment lenders. Terms were typically one, two, or three years. Consumers made fixed payments over the term and, when you were done, you owned your refrigerator, dining room set, or outboard motor outright.

A drawback for merchants selling on installment plans was that a consumer had to apply for a new loan with each new purchase. That slowed purchases and led merchants to embrace revolving credit, which eventually displaced installment credit as the predominant form of retail finance during the 70s and 80s. Sears and other retailers issued their own store credit cards and then accepted general purpose credit cards issued by banks. (Sears eventually launched the Discover Card.) Sears and other retailers recognized that customers made larger purchases when they weren't constrained by the amount of cash they brought into a store and when they didn’t have to apply for a new loan for each purchase.
Bank cards’ flexibility enabled the growing number of cardholders to purchase a much wider range of items on credit, including clothing, vacations, a night out, or even groceries and gas for the car. That flexibility also made them useful in emergencies. In many households that lack emergency savings, credit cards are now the main back-up. A Demos survey\(^1\) of low-to moderate-income (LMI) households in 2012 found that over a 12-month period, 40% had borrowed on their credit cards at least once to pay for basic needs when they were hit with unplanned expenses or lapses in income.

The larger problem is that the “plastic safety net” has fueled a relentless increase in credit card debt, interrupted only briefly by the 2008 financial crisis. The open-ended structure of credit cards explains a lot of that growth. Their flexibility lets a consumer replace a broken water heater without having to tap emergency funds. But open-endedness can tempt consumers to stretch out their debt longer than they had intended, and the instant credit availability that cards provide makes it perennially tempting to make discretionary purchases that can add on more debt.

Roughly half of credit card users are “revolvers” who carry balances from month to month and account for nearly half of outstanding credit card balances. In a NerdWallet survey, 42% of revolvers reported taking on more debt than they’d planned, and most make monthly payments at or near the minimum,\(^2\) stretching out the time they stay in debt and maximizing the amount of interest they pay. An average household revolved balance of $6,929 would take over 20 years to pay off using the typical minimum payment formula.

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‘Installmentizing’ the Credit Card

RESTORING INSTALLMENT PAYMENTS DIGITALLY

Watching their parents struggle with persistent credit card debt has reportedly made millennials and Gen Z-ers more conservative about taking on revolving debt. Possibly as a result, they are helping installment loans make a comeback. Installment loans’ equal payments and fixed terms—one to three years—automatically commit a borrower to paying them off.

A number of fintechs are offering new ways to self-impose an old discipline. Affirm has signed up over 3,000 merchants (including Walmart) to offer installment financing for large-ticket items sold by online and brick-and-mortar retailers. This is a modern spin on the financing plans once offered by Sears. GreenSky and Square offer similar financing, and Amazon has introduced installment purchase plans on selected products. Using streamlined access to borrowers’ credit and checking account history, the new installment lenders can underwrite almost instantaneously. This relieves shoppers of the wait they once experienced at a store’s credit department or when ordering by mail, and provides retailers with the same certainty of closing a sale as credit cards.

Installment loans have also made a comeback as a way to pay off credit card debt. Marketplace lenders such as Lending Club and Prosper have offered unsecured installment loans with fixed terms for some time, joined more recently by Goldman Sachs’ Marcus and others. The most frequent reason borrowers give for taking these loans is to pay down existing credit card debt.

Credit card issuers themselves have gotten into the act. Citi, Amex, and Chase now offer the ability to convert portions of their revolving balances into installment loans so that cardholders can commit to paying them off in a term of their choosing. Some banks and credit unions that aren’t their depositors’ credit card issuers have begun to offer installment loans to help their depositors do the same, and possibly build deposits in the bargain.
## RESTORING INSTALLMENT PAYMENTS DIGITALLY

<table>
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<th>FEATURES/SERVICES OFFERED</th>
<th>RATES AND ECONOMICS</th>
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<tbody>
<tr>
<td>My Plan</td>
<td>Applied to purchases after the fact. Issuer still earns interchange. Consumer voids interest charges on remaining balance on credit card line if it is paid in full.</td>
<td>Consumer sets length of term to cover recent purchases of over $500. Payment = financed amount /n (months) plus a fixed monthly fee of up to 1.72% of the financed amount over the term.</td>
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<tr>
<td>Chase “My Chase Plan”</td>
<td></td>
<td></td>
</tr>
<tr>
<td>American Express “Pay It Plan It”</td>
<td>Applied to purchases after the fact. Issuer still earns interchange. Consumer avoids interest charges on remaining balance on credit card line if it is paid in full.</td>
<td>Consumer sets length of term from 3-24 months to cover recent purchases of over $100. Payment = financed amount /n (months) plus a fixed monthly fee of up to 0.66% of the financed amount.</td>
</tr>
<tr>
<td>Citi “Flex Loan”</td>
<td>Loan funded to consumer’s bank account or by check. Proceeds can be used to repay revolving balance on card. Installment payment becomes part of minimum monthly payment amount on credit card.</td>
<td>Consumer sets term of 12-60 months. APR as low as 9.99% depending on creditworthiness. Amount limited to size of available line on credit card.</td>
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<td>tally</td>
<td>Optimize credit card account payments to pay down outstanding balances. Automate payments and installment amounts to hit debt reduction targets. Credit line to consolidate debt and lower interest costs. Late fee protection.</td>
<td>APRs on credit lines as low as 7.9%. Term set by consumer to achieve affordable payments. Payments to multiple card accounts consolidated into a single periodic payment.</td>
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Keeping a cache of savings for use in emergencies can be hard. It’s especially difficult for low- to moderate-income (LMI) households who earn just enough to cover their living expenses, whose incomes are often volatile, or who may need to tap emergency savings often. Building such a cache means regularly diverting a portion of income into it, avoiding the temptation to raid it for discretionary spending, and then replenishing it after a true emergency arises.

The fact that so many households have too little saved for emergencies may be partly because of banking and payment features that make it too easy to access funds and credit. In fact, most users of payday loans, those expensive emergency loans of last resort, once had credit cards but used up their credit lines without being able to repay them.

Many consumers keep their emergency funds “out of sight” at separate institutions from their checking accounts to prevent themselves from accessing the money too easily. Others cordon off their savings from temptation outside of the formal financial system, keeping a stash of cash hidden away where they’re not likely to think about it. Still others go to even greater lengths to make their emergency savings hard to tap: In focus groups and interviews with LMI consumers, we’ve witnessed a woman who keeps a wad of bills frozen in a block of ice in her freezer to keep the funds nearby, but not available for immediate use, and a man who hands over his extra cash to his trustworthy but dour mother-in-law, who won’t return his funds without his providing serious justification. Even the old-fashioned porcelain piggy bank that couldn't divulge its contents without being broken represented a form of self-imposed friction to preserve rainy day funds for true emergencies.

That so many consumers resort to multiple institutional relationships or home-grown methods to help them build, protect, selectively use, and replenish emergency funds reflects a shortcoming in the supermarket model that most banks have built in the age of frictionless banking. Even though many banks – and some employers – offer automated savings functions, they don’t provide the basic means for compartmentalizing savings set aside for emergencies.
Fintechs such as Digit, SaverLife, and others encourage emergency savings in dedicated accounts that are in separate institutions from where consumers deposit their paychecks and manage their spending. This adds an intentional level of friction between different parts of consumers’ financial lives. Banks and credit unions can begin to replicate some of the home-grown speed-bumps consumers have used to keep emergency funds apart and out of sight. Potential behavioral devices include:

**Letting consumers impose a 24-hour waiting period on themselves** before they can access emergency funds. A consumer’s initial request to tap the funds would need to be granted by her day-older self (who may decide she can do without the money after all).

**Letting consumers designate an emergency buddy,** whose electronic signature would be needed before funds can be accessed. Like the man who gave his funds to his mother-in-law for safekeeping, designating someone who will need to know the reason for a withdrawal might make account holders think twice before asking.

**Treating consumers’ use of emergency funds as loans.** When they withdraw funds, they commit to repaying them in installments. They could even charge themselves interest so their cache will grow with each use. Making borrowing from themselves the default choice over using a credit card will help them resist temptation to charge their way out of emergencies. And since this resembles the savings-based loans that Self Lender, other fintechs, and many credit unions have devised for building credit, this approach to tapping and repaying emergency funds could also provide a credit-building benefit.

Behavioral tools that help build and preserve emergency funds probably won’t work for families who just don’t earn enough to cover their basic expenses, or who are already overloaded with debt they took on to cover past emergencies. Still, many will be able to benefit from self-imposed friction that protects them from themselves.
### DIGITAL VERSIONS

**PLATFORMS OFFERING AUTOMATIC SAVINGS AND/OR ROUND-UP SAVINGS FEATURES**

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<th>Digit</th>
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<td>Empower</td>
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<td>mvelopes</td>
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* Only a partial listing.
“Retronovations” are digital versions of classic behavioral tools that households have long used to manage their finances with less uncertainty and stress in the short term and build greater resilience and financial options for themselves over the longer term. While they have mostly been brought to market by fintech startups, they could feasibly be offered by banks and credit unions as staple features of checking and transaction accounts.

Still, the catch-22 remains: Until these apps have been in the market long enough to measure their impacts on users’ financial health and to demonstrate a clear revenue model, some institutions may find it difficult to make an internal business case for building and offering them. Yet without a significant installed base among institutions, the market will be short on such evidence.

We think this catch-22 can be overcome. We’ve tried to make the case that a preference for fintech-supplied solutions (as evidenced by the many paying users), coupled with consumers’ intuitive familiarity with the classic financial habits they restore, shows that these retronovations will gain high rates of adoption when institutions offer them to their customers. Further, fintech pioneers suggest that banks and their technology suppliers will find these systems relatively inexpensive to design and build. Consumers who are already using a patchwork of third-party apps – or who are falling back on cash-based systems to “hack their banks” – provide a set of behavioral blueprints for digital versions.

The fact that tens of millions of consumers are adopting these retronovations to manage their daily financial lives—and paying for them—bodes well for banks and credit unions.
Then there is the disincentive posed by reducing overdraft: If the retronovations successfully serve their purpose, they will help households who are living paycheck to paycheck avoid overdrawning their accounts. That butts up against many institutions’ heavy dependence on overdraft revenue.

Fortunately, the fintechs who offer many of these apps on a direct-to-consumer basis are demonstrating that consumers are willing to pay for them. Monthly subscription fees for individual features average $5 to $10 per month. So adding retronovations could generate a new source of recurring revenue, while also enabling institutions to meaningfully differentiate their deposit account offerings and avoid the “tyranny” of free checking that has plagued institutions since the 1990s. While free checking has benefited many consumers, it has arguably drawn banks and credit unions into a race to the bottom to attract frequent overdrafters and extract maximum revenues from them.

CONCLUSION

A high-value checking account generating recurring subscription revenue could re-align institutions’ incentives toward improving consumers’ financial health. Many Financial Health Network Member institutions report higher-than-expected shares of new customers are choosing basic transaction accounts that don’t permit overdraft and carry modest monthly maintenance fees. Many of these consumers are not formerly unbanked individuals or those who need “second chance” accounts due to prior defaults; they are simply voting in favor of being certain about their monthly bank account costs. We expect that having an option to add more functionality in return for higher monthly fees will appear natural and transparent to these consumers.