

Child savings accounts:

Using technology to
engage participants and
administer programs



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1. Introduction

Children's Savings Account (CSA) programs provide children and families with long-term savings or investment accounts, and incentives to build savings for their future. Although CSA programs vary in design, they all focus on helping children access post-secondary education by increasing financial capability and educational expectations of children, parents and caregivers.

Children's savings account (CSA) initiatives are spreading around the country with over 50 programs currently in operation and others in various stages of development. While there are many similarities in the long-term goals of most programs, there are also great variations in design and implementation based on the populations they serve, the goals they are attempting to achieve, and the capital and human resources they have available. The primary goal of most CSA programs is to provide children and families with long-term savings or investment accounts and incentives to build savings for their future post-secondary education. Many programs begin enrolling children and families at birth, or at the beginning of elementary school and attempt to engage participants over 12 to 18 years in savings and other connected services that help to prepare them for future educational opportunities.

One of the key aspects of CSA program infrastructure is the use of technology. CSA programs are using technology for a variety of purposes, program promotion, participant engagement, account tracking and program management, delivery of information and services to participants, communication with partners and stakeholders, and program evaluation.

This is one of four in-depth topic briefs prepared by the Consumer Financial Protection Bureau (CFPB or Bureau). The four topic briefs cover:

- Engagement strategies to increase inclusion;
- Using incentives to encourage participation;
- Integrating financial education into children's savings account programs, and
- Using technology to engage participants and administer programs.

The goal of these topic briefs is to synthesize the direct experience of a sample of CSA programs to highlight the key opportunities and challenges that CSA programs are attempting to address within each topic area. The topics were chosen by the Bureau, with input from its contractor Abt

Associates and subcontractor Prosperity Now¹ staff, and build on areas in the Field Scan² data that CSA programs identified as requiring a deeper understanding.

One of the Bureau’s statutory directives under the Dodd-Frank Wall Street Reform and Consumer Protection Act³ is to implement initiatives intended to “educate and empower consumers to make better informed financial decisions.”⁴ The Bureau seeks to enhance the financial knowledge and skills of all Americans and provide them with effective financial education, from childhood to in later life, so that they can establish and build a solid foundation of financial well-being.

The Bureau’s Strategic Plan for Fiscal Year 2018-2022, outlines a strategy to “address needs for inclusion and financial security of servicemembers, older Americans, traditionally underserved consumers and communities, and students.”⁵ The Office of Community Affairs,⁶ within the Bureau’s division of Consumer Engagement and Education, provides tools, resources and information to help traditionally underserved consumers become more financially stable and secure. One of the projects the Office of Community Affairs has pursued is the *Child Savings Account Initiative*. To advance inclusion of traditionally underserved consumers, the Bureau is engaged in building the capacity of child savings programs to provide savings opportunities to economically vulnerable children and families which research has shown will increase the likelihood that a child will be able to enroll in and complete a post-secondary education.

¹ Abt Associates, Inc. conducted interviews on behalf of the Bureau. Abt was selected through a competitive solicitation (contract number GS-10F-0086K). Prosperity Now is a subcontractor to Abt for this project.

² Field Scan surveys were conducted independently by Prosperity Now in the fall of 2017 with 36 CSA programs responding. Data for 18 other CSA programs were incorporated into the data-set for most topics based on publicly-available program information, responses to the 2016 CSA Program Survey and email correspondence. Field Scan unstructured interviews were conducted between October and November 2017 with 13 CSA programs. These programs were selected based on the information they could share on funding, incentives, engagement and/or policy. A range of programs were selected to reflect variations in CSA program models, but they are not intended to be fully representative of the whole field. Prosperity Now, 2017, “State of the CSA Field.” Accessed June 6, 2018: <https://prosperitynow.org/resources/movement-takes-state-childrens-savings-field-2017>

³ Public Law No. 111-203.

⁴ 12 U.S.C. 5493(d)(1).

⁵ The Bureau’s Strategic Plan for FY 2018-2022 can be found on the agency’s website, at www.consumerfinance.gov/about-us/budget-strategy.

⁶ The Office of Community Affairs was formerly known as the Office of Financial Empowerment.

2. Methodology

Technology innovation is rapidly transforming the face of financial, educational and non-profit services. CSAs are no exception to such transformations as new technologies offer the promise of scalability and efficiency with applications such as tailored outreach to participating families. However, increasing digitization of CSA programs may have implications for lower-income and more vulnerable families.

There are substantial differences between CSA programs in their ability to effectively use technology. The deployment of technological solutions is often dependent on available financial and technical resources and technological capability of staff, as well as program scale and overall program goals. Like many other fields of endeavor CSA programs generally attempt to utilize technology to increase efficiency and reduce costs at the program level while also using it to engage with program participants effectively to achieve their short, medium and long term goals.

Drawing on the perspectives of CSA programs and the technology companies they work with, this brief articulates some of the key issues that should be addressed in the field of technology to ensure that CSA programs remain fully accessible for low-income and vulnerable families. Issues addressed in this brief include:

- Incompatible technology infrastructure between the financial sector and CSA programs
- The digital divide
- Interface between participant and CSA technology
- Disbursement requirements and technology

The observations articulated in this brief draw from a range of data sources:

- Field scan data and interviews conducted independently by Prosperity Now staff.⁷

⁷ Field scan surveys were conducted in the fall of 2017 with 36 CSA programs responding. Data for 18 other CSA programs were incorporated into the data-set for most topics based on publicly-available program information, responses

- Unstructured discussions conducted by Abt staff with nine CSA programs and CSA technology providers.⁸
- Notes from a recent technology conference co-hosted by Prosperity Now and San Francisco Kindergarten to College.

This brief provides an overview of some of the key challenges and benefits of deploying technology in CSA programs. The Bureau gathered information^{9,10} through key interviews with CSA program staff and with representatives of technology firms that have either created or adapted software solutions to meet the needs of CSA program and their participants. Some of the issues addressed in this brief related to technology use in CSA program include:

- The role of technology in reaching scale
- Uneven technology infrastructure in the financial sector
- The digital divide
- Interface between participant and CSA technology
- Disbursement requirements and technology

Finally this brief offers some recommendations for funders, researchers and technology providers on some basic steps that may better align technology solutions with the needs of both CSA program participants and program administrators.

to the 2016 CSA Program Survey and email correspondence. Field scan unstructured interviews were conducted between October and November 2017 with 13 CSA programs. These programs were selected based on the information they can share on funding, incentives, engagement and/or policy. A range of programs were selected to reflect variations in CSA program models, but they are not intended to be fully representative of the whole field.

⁸ A variety of questions about technology were discussed with program staff from: Commonwealth, Investcloud, Vistashare, Boston Saves, FundmyFuture, San Francisco K2C, I Have a Dream Foundation, KidFund, and Rhode Island College Bound Baby.

⁹ Abt Associates, Inc. conducted interviews on behalf of the Bureau. Abt was selected through a competitive solicitation (contract number GS-10F-0086K). Prosperity Now is a subcontractor to Abt Associates for this project.

¹⁰ This brief includes links and references to third-party resources or content that consumers may find helpful. The Bureau does not control or guarantee the accuracy of this third-party information. By listing these links and references, the Bureau is not endorsing and has not vetted these third-parties, the views they express, or the products or services they offer. Other entities and resources also may meet your needs.

3. Program findings

3.1 Role of technology providers in reaching scale

Technology is being incorporated into a CSA program’s structure on a spectrum of intensity. On the low-intensity end, technology is being used to track program metrics in software such as Microsoft Excel which is effective at storing information but has some limitations in automating processes. As of the end of 2017, a majority (52 percent) of CSA programs surveyed for the 2017 Field Scan were using Excel to track their program data. At a medium intensity, technology can facilitate greater efficiencies for CSA programs allowing for the automation of some program activities such as data collection and information sharing (e.g. with technology products such as OutCome Tracker or InvestCloud¹¹). With medium intensity technology intervention, some CSA program activities remain face to face, such as workshops or teacher-student interactions. High intensity engagement with technology may mean technology is at the very core of the structure of the CSA program with automated processes and technologically-facilitated social interactions. The extent to which CSA programs are using technology to facilitate social interactions and program engagement with participants is unknown; however based on anecdotal information, it is likely very limited.

CSA programs generally recognize that they need enhanced technology to allow them to scale up. For example, Jeremy Resnick at Fund My Future¹² captured this key sentiment:

Fund My Future worked really well as a small program. It was very hands-on, and the teachers were very involved in taking contributions. Everything could be done in

¹¹ OutCome Tracker and InvestCloud are technology platforms which allow clients to see account balances and allow program managers to communicate with clients, and manage data collection and information sharing about savings.

¹² From FundmyFuture website Accessed June 6, 2018 <http://www.fundmyfuturepgh.org/about-fmf/> “Fund My Future is a program administered by the Propel Schools Foundation to help families of children in Allegheny County [Pennsylvania] save for college and other post-secondary goals. Fund My Future provides a prize pool that makes the saving experience fun. Community events with partners make it easy to save in a variety of ways and places ... Fund My Future is now universally available to all Allegheny County families with children, from birth to age 18.”

schools. Everything was very controlled. As you move toward scale ... it becomes hard to keep track of things. In order to better manage data and keep track of things.

Fund My Future reported that it invested in technology, specifically InvestCloud, as a way to manage data and client interactions in taking their program to scale at the city level.

Given sufficient capacity and expertise, CSA programs could automate and use technology in several aspects of their programs to efficiently reach scale including:

- Tracking participant outcomes (savings, milestones, etc.)
- Administering program incentives;
- Engaging with participants;
- Interfacing with program stakeholder data systems such as school districts and banks;
- Complying with legal requirements related to specifics of the program;
- Disbursing of funds;
- Reviewing program data for program improvement; and
- Facilitating participant social interactions.

To make these uses possible for more CSA programs, nascent CSA technology is moving forward rapidly, offering the possibility for real increases in scale within a few years. Three companies were interviewed that are providing different kinds of technology options for CSA programs. Each company is trying to achieve different objectives with their product, representing some of the diversity among CSA programs and associated technologies.

3.1.1 Outcome Tracker

Vistashare's Outcome Tracker offers an example of a non-profit client management data base that has been customized for use by CSAs. It is used by opt-in and opt-out¹³ CSA programs of

¹³ An "opt-in" model requires the consumer to take an affirmative action to sign up or enroll in order to participate. An "opt-out" model adopts a default of inclusion and the consumer has the choice to opt out and not participate.

varied sizes. Approximately one third (31 percent) of CSA programs surveyed in the Field Scan used Vistashare's Outcome Tracker.

Dave Smucker from Vistashare described how Outcome Tracker works:

In our system... we bring together ... the children's information along with their account information. We give the ability for the family to interact through a portal, on their computer or phone, to be able to go in and see their account information—and if it is a 529 [program],¹⁴ to actually create a 529 account. We provide that central hub of data and we also provide the CSA program with a platform to communicate with the families.

Dana Peterson-Fatuda, from the state-wide Rhode Island CollegeBound**baby** CSA program,¹⁵ described how Outcome Tracker helps to manage the enrollment process. The Department of Public Health sends participant email addresses and information on whether a person wants to opt-in to the CollegeBound**baby** CSA program through Outcome Tracker. Outcome Tracker is preprogrammed to then send out a seven digit code to people enabling them to log in and see the \$100 grant awarded to them by the state for their child's account.

In addition to Outcome Tracker tracking and managing data, Outcome Tracker also has the capacity to send instructions out to different stakeholders to invest money based on the CSA program incentive structure. Dave Smucker described the process:

We help with the management of all the seed money and incentives. That all originates from our system based on the choices that a program makes. For example, it might be that everyone in this cohort gets \$50 ... or everyone who saved for five or more months

¹⁴ A 529 account is an investment account for college and as of recently, private Kindergarten through High-School, which is tax preferred. Many CSA programs open 529 accounts for participating children.

¹⁵ CollegeBound**baby** is a program administered by Rhode Island's 529 College Savings Plans — CollegeBound Saver and CollegeBound 529 — designed to help families get an early start at saving for their child's higher education. All children born to or adopted within one year by Rhode Island families are eligible for a \$100 CollegeBound**baby** grant to be used for higher education. The grant will be held and invested by The Office of the General Treasurer in a master account on behalf of the child until the child is ready to attend a higher education institution." CollegeBound**baby** website Accessed June 6, 2018. <https://www.collegeboundsaver.com/cbb/q--a.html>

gets \$25. For a 529 we send instructions to the 529 provider to actually make that investment. It's not just aggregating information.

For bank-based custodial accounts, the system also instructs the bank on which accounts to set up. The bank reports information back to Outcome Tracker which organizes the information, allowing program administrators to see how much money each person participating in the program has saved and to share this information back with people.

3.1.2 InvestCloud

InvestCloud is, in the words of Will Bailey, Executive Vice President, “a technology platform that aggregates financial information from bank or investment accounts like 529s and provides client communication to savers as well as information, automation, and management tools for program administrators and program participants.” Program administrators can see “data views and data analysis tools to view users' accounts and transactional activity to do analysis on the program side.” People can view their account balances as well as other metrics of engagement, such as the number of times they’ve deposited into their account. The participant view also allows program administrators to share customized information targeted for people participating in the program, such as information about financial capability or post-secondary education. InvestCloud was originally designed for investment managers or people who manage large investment portfolios. However, it has been customized to work with CSA programs and is being used by programs such as Boston Saves¹⁶ and Fund My Future.

Program administrators using InvestCloud reported excitement about the technology because it allowed for, as Kim Lucas of Boston Saves said, a “bank agnostic” children’s savings account. People could use their own chosen bank accounts to qualify for the CSA program incentives. To join the program people just needed to link their existing or new CSA bank account to the InvestCloud portal. However, program administrators described the linking process as lengthy and tricky; and despite being linked once, a change in bank account passwords could cause the account to become unlinked. The technology also presupposes a participant having a bank account, a challenge if people who want to participate in the program are unbanked. Boston

¹⁶ “Boston Saves gives each kindergartner an account with \$50 from the City of Boston. The money in this account can be used for college or job training costs after the student finishes high school. Families can earn more from the City by activating their child’s account, and adding at least \$25 to the account every three months, starting each October. Using an online platform, families can track all of their savings for their child in one place. Schools also host family events and classroom activities to make saving fun. Mayor Walsh piloted Boston Saves with five public schools in fall 2017. The program will start growing to all district and charter schools by fall 2019.” Boston Saves website Accessed June 6, 2018. <https://www.boston.gov/departments/schools/boston-saves>

Saves has worked around this challenge by offering a custodial account as one option parents can choose.

3.1.3 KidFund

KidFund is both a technology platform and a college savings account platform.¹⁷ It offers an innovative example of ways that technology can leverage social networks towards the goal of saving. As Laura Bailyn, CEO says, “the KidFund technology is designed to overcome real and behavioral barriers to saving — making it easy to get started and engaging a family’s community to increase the number and frequency of deposits in kids’ accounts.” The company has launched a beta version of an app to allow families to set up a savings account for their children and then to link the savings account to family and friends who might also wish to contribute. Each contribution to the savings account provides a pre-set percentage to Prosperity Now’s 1:1 fund,¹⁸ a program targeted to provide match funds for low-income families in CSA programs around the country.

While the company hopes to engage lower-income families eventually, currently lower-income families are not their direct customer. They are not providing their technology at this point to other CSA programs. However, KidFund provides an interesting window into how CSAs could use technology effectively to leverage social engagement by families and friends. Indeed, a number of similar “college savings registries,” such as Gift of College¹⁹, and College Backer,²⁰

¹⁷ College savings accounts allow families to save for their children’s college. However, they do not provide incentives such as seed deposit, match or benchmark incentives for savers.

¹⁸ Prosperity Now’s 1:1 Fund supports the growing number of programs that offer CSAs. Many CSAs struggle to find donors to “...match the contributions of children saving for college. The 1:1 Fund fills this gap by enabling donors, large and small, to contribute matching dollars that motivate students to save and strive for college.” 1:1 Fund website Accessed August 16, 2018. <https://www.1to1fund.org/impact#impact>

¹⁹ GiftofCollege is a commercial college savings gifting platform. For more information see <https://www.giftofcollege.com/>

²⁰ Collegebacker is a commercial online portal that automates college savings by allocating money into a tax-advantaged college savings plans. For more information see <https://collegebacker.com/>.

similarly make use of social sharing to encourage family and friends to make savings contributions for kids.²¹

3.2 Incompatible technology infrastructure between the financial sector and CSA programs

CSA programs, paralleling the challenges presented by the FinTech²² industry more generally, face the challenge of bank and credit union technology infrastructure that is incompatible with CSA program management systems. CSA program staff and technology stakeholders described how smaller, local banks and credit unions—while often more flexible in serving vulnerable and low-income families—had fewer resources to develop the technological interfaces necessary to provide data to CSA tech companies like InvestCloud or Vistashare. As a result CSA programs using such technology may be somewhat limited in which banks and credit unions they are able to work with.

Boston Saves is a CSA program that uses InvestCloud. From interviews conducted with potential participants, Boston Saves staff learned about the importance of allowing people to use their own bank accounts in the CSA program. For example, one person who considered participating in the program, wanted to be able to deposit money in a local bank that was far enough away that it made it hard for her to withdraw that money. Participant interviews also revealed a level of distrust of banks among some consumers. Some participants also expressed a desire to be able to deposit cash; 529 accounts do not allow cash deposits in Massachusetts. For these reasons it was important that the program allow Boston families to use small and local credit unions and banks. However, Kim Lucas from Boston Saves found that some small local banks and credit unions did not have the technological capacity to interface with the InvestCloud data aggregator. Kim Lucas said:

The smaller banks are much more agile, much more responsive in creating the kind of financial products that are good for an introduction into banking with a financial

²¹ Conversation with Carl Rist of Prosperity Now.

²² “Fintech industry” is the emerging world of financial services that is provided through technology. This industry is disrupting traditional ways that financial services are delivered.

institution. However, we have found that generally speaking those same banks, given their smaller scale, face more challenges with creating a streamlined, easily accessible and user-friendly technological platform for our program.

InvestCloud, aware of this problem, was trying to work with partners to find solutions. Will Bailey from InvestCloud observed; “the biggest [challenge] is the lack of standardization across the financial institutions, which is not a unique problem to CSAs ... but which is a problem across the industry. Especially when you are working with smaller balances, it is harder to get institutions to move quickly.” Bailey said that their company reached out to the smaller credit unions and banks where people participating in CSA programs were experiencing problems. He described the response of those banks and credit unions:

☞ KEY TAKEAWAY: To increase participation, CSA programs are trying to respond to participant’s varied needs for depositing and maintaining accounts. However, inconsistent financial institution operating systems make technology interface difficult and limit the options programs can offer to participants.

In the main, [smaller credit unions and banks where CSA program participants are experiencing problems] don’t ignore us; but they do let us know that from a financial imperative they have other priorities that are higher. They are working with IT budgets that are constrained and really focus investment around how they bring more revenue in the door. For better or for worse I don’t think they see providing CSA information as a revenue driver.

Dave Smucker from Vistashare talked about successes and challenges that Vistashare has had in working with some of the smaller credit unions and banks:

In both IDA [individual development accounts] and CSAs we’ve had a number of banks and credit unions that have been very willing and able to make the interfaces work. We have tried to make it as simple as we can, but sometimes it’s just not there; they are just not interested or able to interface with us. Other than trying to make it easy I am not sure if there are things we have done that have been helpful to get more participation.

The lack of capacity to interface with CSA programs is not limited to just small credit unions and banks; in some cases, state 529 programs are unable to interface with CSA programs’

technological needs. Inversant²³, a small CSA program in the Greater Boston area experienced this problem working with the statewide 529 program in Massachusetts (MA 529).

For CSAs to effectively use technology, challenges with the uneven technology in the financial sector will need to be improved. Opportunities exist to address these challenges. The CDFI Fund in the U.S. Treasury has in the past provided technology improvement grants for Community Development Financial Institutions (CDFIs). Such small technology grants might help small banks and credit unions to standardize and update their technological infrastructure. Government or philanthropy could provide alternative tools to create an incentive for banks and credit unions to invest in technology that would enable CSAs to better interface with their technology systems.

3.3 Digital divide

Financial services are increasingly being digitized. With digitization comes the potential for inequity, embodied in the digital divide.²⁴ Two core themes emerged from the discussions with CSA program staff about the increasing digitization of financial services and emerging inequities. First, low-income, elderly, and rural families may have less or different access to the internet from urban, suburban and more highly resourced families. Second, low-income families have a greater tendency towards using cash for financial transactions as compared to digital solutions.

²³ Inversant is a CSA program in the Greater Boston area in Massachusetts that engages families to learn about college and save for college through supportive Learning Circles, monthly meetings where families build a social support structure to help reach college. *“Through working with communities and higher education partners, Inversant provides knowledge, resources, connections, and financial incentives to empower low-and-moderate-income families to invest and succeed in higher education. Ultimately this shared investment and expanded understanding moves not just the child, not just the family, but the whole community, forward.”* Inversant website Accessed June 6, 2018. <http://www.inversant.org/about>

²⁴ The digital divide is a concept that describes the phenomenon of differential access to internet enabled devices such as computers, smartphones and tablets, and high-speed internet. Low-income families and rural communities tend to have significantly less access to high speed internet. David Talbot, 2016. “The Unacceptable Persistence of the Digital Divide” MIT Technology Review. December 16, 2016. <https://www.technologyreview.com/s/603083/the-unacceptable-persistence-of-the-digital-divide/>

3.3.1 Differential access to the internet

The digital divide is well documented. Some families have access to high-speed internet and devices that allow for access to the internet in a variety of formats (computers, smart phones, tablets). Others, particularly those who are low-income, elderly or in rural areas, are more likely to have limited or no access to high-speed internet, and may not have access to devices that enable them to interact with the internet effectively. This can limit the capacity of families to do online banking, or to engage with a CSA program through their website or app.

Although not a CSA program, KidFund launched as a pilot and for technological reasons decided to launch an app on the iPhone. Given the iPhone's price point, this has limited the current reach of KidFund with lower-income families. Their CEO Laura Bailyn provided these details:

The app is currently only available to users of iPhones. We are building both responsive web functionality, so that friends and families can gift without downloading an app, and a native Android platform.” This platform expansion might provider greater reach to lower-income families.

The digital divide does not only impact low-income people. Rural areas often have poor internet connectivity.²⁵ For example, much of Maine is rural and some parts of the state have no high-speed broadband internet service. Colleen Quint from the Harold Alfond Foundation²⁶ described how their CSA program attempted to make sure that their website content and technological interface would work on smartphones. “We did consider this from technology and content standpoints. One thing we know in Maine is there isn't universal

☞ KEY TAKEAWAYS. 1) Certain populations have limitations in accessing CSA program services through digital means. 2) CSA programs and technology providers recognize the challenge and are attempting to craft solutions to increase access and better service their target populations.

²⁵ Anderson, Monica. *About a quarter of rural Americans say access to high-speed internet is a major problem*; Pew Research Center; September 2018. <http://www.pewresearch.org/fact-tank/2018/09/10/about-a-quarter-of-rural-americans-say-access-to-high-speed-internet-is-a-major-problem/>

²⁶ The Harold Alfond College Challenge is a CSA program in Maine that automatically awards a \$500 grant in a 529 account for all Maine resident babies. Harold Alfond College Challenge website Accessed June 6, 2018: <https://www.500forbaby.org/>

connectivity. Having said that, virtually everyone has a smartphone. So we've made sure everything is optimized for cell phone access.”

Other CSA programs and CSA technology providers the Bureau interviewed are thinking about this challenge. San Francisco's Kindergarten to College (K2C)²⁷ is working with their technology provider to ensure that it is optimized for smartphones. InvestCloud is considering the implications of slower internet access for their clients, and is attempting to ensure their product can be used in a slower internet environment.

Similarly for low-income and other vulnerable people in Boston, staff at the Boston Saves program are thinking through ways to ensure digital equity in their CSA program. Kim Lucas said:

We have not ... reached a place where ... we have achieved digital equity across the board, but it is something we are committed to working towards. Because we need to have accounts that have online banking, we recognize the importance of achieving this digital equity to ensure access across the board to all residents and families that want to take advantage of this program. We have been working with the City's Department of Innovation and Technology, who has staff designated to working towards digital equity, and who has already taken significant steps in advancing this work.

Staff at Boston Saves have also been talking with a local digital access organization that provides families with access to computers and low-cost internet access. “It's not enough for us to just provide the ability to link an account. We can bring computers and bring literacy folks out to communities, but sometimes people just need the infrastructure and sometimes they need the program to help walk them through and learn what resources are available to them.”

²⁷ “The San Francisco Kindergarten to College (K2C) Program is a college savings program by the City and County of San Francisco in partnership with the San Francisco Unified School District (SFUSD). A K2C college savings account is automatically opened for each SFUSD student entering kindergarten, or a participating program year. The City and County of San Francisco starts each account with \$50, and families have the opportunity to earn additional incentives.” San Francisco Kindergarten to College website Accessed June 6 2018:
<http://sfgov.org/ofe/k2c>

3.3.2 Cash economy versus the digital economy

In the United States, low-income families are more likely to engage in a cash economy than families with higher incomes. A 2017 report by the FDIC found that one third of households (33.7 percent) earning less than \$15,000 paid bills using cash, as compared with seven percent of households earning more than \$75,000. Use of cash is often related to being unbanked. Two thirds of families who are unbanked paid bills using cash.²⁸ Analysis of the 2015 data shows that low-income families are much less likely to be banked than their upper-income peers. A quarter (25.6 percent) of families earning less than \$15,000 were unbanked. By contrast 0.5 percent of families earning more than \$75,000 were unbanked. People of color and/or people with disabilities were also more likely to be unbanked. Jeremy Resnick at Fund My Future indicated that he is wrestling with this challenge in his program which uses InvestCloud, a highly technological interface. Jeremy Resnick said:

It is my understanding that in other countries they have solved this problem, like India. In many parts of the world they have it down to a science: how they can take cash at various places, the interface between the electronic world and the cash world. The U.S. is lagging many other countries, mostly in the developing world. Particularly in the U.S., people with money have given up on cash. They have moved away from it. All the innovation [in this country] that is happening with financial technology is completely unrelated to cash.

All 529 accounts and the majority of larger CSA programs also operate in a cashless landscape; they require someone be banked and able to make an electronic transfer into the 529 account.

Resnick described how his program struggles to get low-income families engaged in the CSA program because at the moment when they have cash to deposit to open up a bank account, there are a number of different barriers—some credit related and some technology related—that mean they can't deposit the cash. They lose interest and walk away. Resnick described efforts to look

☞ KEY TAKEAWAYS: 1) Many lower income consumers still operate in a cash economy. 2) CSA programs recognize the challenge of serving these populations and are attempting to find solutions that make CSAs accessible to people who are not comfortable using or do not have access to digital tools and interfaces to manage their accounts.

²⁸ 2017, Federal Deposit Insurance Corporation. 2015 FDIC National Survey of Unbanked and Underbanked Households. <https://www.fdic.gov/householdsurvey/>

at innovations that would create an interface where families could deposit cash, “We have been looking at things like Square Cash, which essentially allows a trusted agent to collect money. I’ll take \$5 from you and I’ll text it back to you. Now you have \$5 you can deposit into account. We are playing around with things like that.”

Not only is it hard to move cash into a CSA account, but the experience of a child learning about saving—one of many CSA goals—is very different in a digital economy. Jeremy Resnick described the challenge:

The idea that you can teach kids about importance of savings and money without money, without cash ... as soon as you get away from real cash money it becomes harder and harder to think about what things have value and what things don't have value. If I give my child \$1 or \$10 and say 'go to the store and bring back change,' that is a different experience than giving my child a credit card or debit card and saying 'buy me whatever and swipe the debit card.' The same thing for saving. If I give my child \$1 or \$2 and tell them to deposit into their savings account, that is different than my going to a computer and transferring \$1 into their 529 plan.

Resnick is exploring “How could I as a parent hand something to my child that is electronic but is somehow equivalent in some way to cash money so they have that kind of experience? No one has had any [brilliant ideas], but we are going to keep thinking about it.”

Many CSA programs are just beginning to think about the interface between cash and participating in CSAs. Fintech innovation may provide opportunities, and CSA programs may be in a position to help drive innovation in this area because they recognize that at least some of the families they are attempting to serve face this technological challenge.

3.4 Interface between participants and CSA technology

Technology has the capacity to simplify and streamline the interactions between the CSA account and the person who has it. For example, Common Cents Lab²⁹ recently tested whether using technology to streamline the return of administratively necessary consent forms at St. Louis College Kids³⁰ would improve the return rate. Joseph Sherlock of Common Cents Lab said, “We found that people would take pictures of consent forms on their cell and would return it.” St. Louis College Kids program administrators were encouraged by this use of technology and the improved return rates, and are looking for ways to incorporate more text messaging into their program, testing the effectiveness of these new engagement approaches with Common Cents Lab.

Common Cents Lab and St. Louis College Kids are also working on streamlining another aspect of CSA account interaction through technology. Working with a local supermarket, they are automatically depositing purchase rewards as dollars into people’s CSAs.

While these kinds of technological advances are improving the experiences of some people in the program and helping shift people’s behaviors towards greater enrollment and potentially greater savings, many CSA programs are struggling with the need for more user-friendly interfaces between people and their CSA accounts. Several CSA programs

KEY TAKEAWAY: For technology to provide efficiencies for CSA programs and to effectively serve families who may be less digitally literate, technology providers will need to solve the conundrums of lengthy and difficult application and sign-on processes through current technological interfaces.

²⁹ Common Cents Lab, part of the Center for Advanced Hindsight at Duke University, uses behavioral science to increase the financial well-being of low to moderate income households.

³⁰ “Started in 2015 by the St. Louis Treasurer, the College Kids program encourages children to think about college from a young age. The program automatically opens CSAs at a local credit union for every kindergartener in St. Louis public and charter schools and seeds the accounts with \$50. College Kids provides other incentives to grow savings, including matching parents’ savings and an extra deposit for good school attendance. College Kids also connects participants’ parents with financial capability services that help them become more financially secure.” From the Prosperity Now website description of CSA programs. Accessed June 6, 2018: <https://prosperitynow.org/about-csas>

are looking for ways to simplify the processes of enrollment, account monitoring, and deposits, lowering the barriers to full participation in the CSA program.

Simplifying people's experience with the program is not always easy or desirable. Dave Smucker talked about the trade-off between having a more straightforward sign-in process versus the need to manage privacy and security in the Outcome Tracker system:

When someone signs up for a portal profile (a user name and password), if they want to link to their child, they need to know something about the child that other people don't know. You don't want other people to be able to access that child's record. Their preference would be 'type in my child's name and select them and pull them up,' which would be the easiest thing to do. But for security reasons we can't do that. Or when they are signing up for a 529 account, from a legal standpoint there is a lot of data they need to enter. That is not as simple as putting in your name and address. There are legal requirements about what the 529 provider has to collect.

Outcome Tracker is not the only software that is attempting to simplify the participant process. Boston Saves and Fund My Future both use InvestCloud as the technology platform for their CSA programs and see people struggle with the steps required to use the software. To enroll in the program, people must log into InvestCloud and link a bank account. Both programs reported struggling to get some interested families to complete this task. This is because the process requires a series of steps to link to the bank account, which might include families that are unbanked having to open a bank account.

3.5 Disbursement requirements and technology

Since CSA programs are relatively new, the technological challenges that many of them are currently wrestling with tend to be focused on enrolling and engaging participants. However, a longer-term challenge faces the field; disbursement of funds. CSA programs face several decision points that will need to be reflected in the technology.

First, CSA disbursements in some cases are required to be used directly for educational purposes. Dave Smucker of VistaShare has been considering this challenge with funders of CSAs that have requirements and regulations that the money given to families be used only for educational purposes. Dave Smucker said:

For at least one [funder of CSAs], we said, ‘Couldn’t we distribute it to their individual 529 account and they can withdraw it from there?’ They said ‘No, they can’t do that, because they might withdraw it and not use it for education.’ From their standpoint the only legitimate way to distribute the money is for the funds to be sent directly to an educational institution on behalf of the student.

Technology providers have to consider how they will structure the technological interface for disbursements, and this will depend on the requirements of the CSA program. Smucker talked about the need for this functionality: “We would anticipate that our system will eventually need to give a family the ability to request a withdrawal and specify where that withdrawal should go and then have that kick off steps that help the organization to actually do it.”

Another decision point that CSA programs will need to make is how to distribute money in an omnibus account to children that may not meet the account provider’s legal requirements for distribution of funds. For example, they may have undocumented status and therefore no social security number. Smucker is unclear of how this will work and interface with the technology.

□ KEY TAKEAWAY: While the large majority of CSA programs are several years away from making disbursements for participant post-secondary education, technology providers are already considering solutions to make the disbursements legally compliant and also meet the needs of participants.

1. “How do you hold an investment in an omnibus 529 account and then distribute it to different people in a way that includes everyone you want to include and in a way that meets the 529 provider’s legal and reporting requirements? Until these kinds of legal issues are worked out, the technology providers may not be able to program a system that will serve all the intended participants.”

4. Summary and next steps

CSA programs and their technology providers face a set of challenges particularly pertinent to ensuring the programs are inclusive and provide opportunities for more children and families. Following are some possible next steps to address these challenges:

- Developing grant programs by private funders of CSAs to fund technology that would help programs and financial institutions better serve low and moderate income families.

- Conducting specific research on ways to bridge the gap between the digital and cash economies.
- Partnering with digital inclusion programs such as the Center on Financial Services Innovation to ensure access to CSA programs.
- Increasing implementation research that includes participant experiences of enrolling and engaging in CSA programs that are using technology.
- Engaging financial technology (fin tech) firms to create more robust interfaces between institutions maintaining accounts and CSA participants.
- Convening a summit about the considerations and decision points in disbursement of CSA funds to include CSA technology providers, as well as lawyers, CSA programs and appropriate policy makers.