ZEN AND THE ART OF INFORMATION MANAGEMENT

The Current State and Future Evolution of Information Management Systems for Children’s Savings Accounts
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ABOUT PROSPERITY NOW
Prosperity Now believes that everyone deserves a chance to prosper. Since 1979, we have helped make it possible for millions of people, especially people of color and those of limited incomes, to achieve financial security, stability and, ultimately, prosperity. We offer a unique combination of scalable practical solutions, in-depth research and proven policy solutions, all aimed at building wealth for those who need it most.
Introduction

As Bill Gates says, “Information technology and business are becoming inextricably interwoven.” This certainly holds true for Children’s Savings Account (CSA) programs, which need reliable and user-friendly systems to perform critical functions like tracking account activity, managing incentives and reporting account balances to participants. In helping communities to design and launch CSA programs, two of the questions most frequently asked of Prosperity Now staff are, “What kind of account management system should we have in place, and what kind of management information system (MIS) options are available to CSA programs?”

To better answer these questions, Prosperity Now has been engaged for more than a year in a series of explorations and conversations with the field about the current landscape of CSA information systems. These conversations started with the first-ever CSA Information Systems Summit in mid-March 2018, which Prosperity Now co-hosted in San Francisco, in partnership with the City of San Francisco’s Office of Financial Empowerment (OFE) and with generous funding from the Lisa and Douglas Goldman Fund. The one-day summit was a unique event that brought together an experienced group of CSA practitioners along with representatives from a range of financial services and financial technology firms that support (or are interested in supporting) CSA programs. Following the Summit, Prosperity Now staff continued to gather data about CSA information systems in both formal and informal gatherings and added a question about information systems to the State of the Children’s Savings Field 2018 survey.

In the brief that follows, we begin with a review of CSA information systems from the user perspective: who the main users are, what functions they perform, what technology they use, and how they describe their main pain points. Following this, we provide an overview of the CSA information systems marketplace: who the main providers are and what their needs in a new and evolving marketplace are. The brief concludes with a summary of one primary opportunity and one primary challenge for CSA programs in meeting their information management needs.
Information Systems and CSA Programs: The Demand Side

BACKGROUND ON INFORMATION MANAGEMENT AND CSAS

A management information system, or MIS, broadly refers to a computer-based system that provides managers (and other staff or stakeholders) with the tools to organize, evaluate and efficiently manage a program or service. In the context of CSAs, information management falls into two categories:

Administrative Interface (Back Office)
- Account management — Working with the financial institution partner(s), tracking account activity, and managing financial incentives designed to help accounts grow
- Data management — Monitoring and tracking key performance metrics on individual account holders and aggregate program outcomes
- Reporting — Sharing key information on process and program outcomes with funders, organizational leadership, partners and other stakeholders

User Interface
- Communication from Administrators — Sharing messages from program administrators, including action reminders or upcoming events
- Program content — Providing content, including program information, e.g. details about incentive offerings
- Individual/Family Activity Tracking — Displaying individual account balances, including program and family contributions

One way to explore information systems is to examine who uses a particular system, how they use it, and what they want or need from it. What follows is an analysis of CSA information systems from this “demand-side” perspective.

The Most Common Users of CSA Information Systems are Participating Families and Program Administrators

Given the range of partners and participants in CSA programs, there are a number of possible users of CSA information systems. According to an informal poll of Summit registrants prior to the CSA Information Systems Summit, 77% of respondents (more than one response was possible per registrant) indicated that families of CSA participants are primary users of their information system. An equal number of respondents reported that program administrators are primary information system users. Other common users included financial institution partners (31%) and school administrators (23%).

Who are your primary MIS users today?

- Families: 77%
- Program Administrators: 77%
- Financial Institution Partners: 31%
- School Administrators: 23%
Ideally, CSA practitioners would also like other partners to be able to use or access program information. When asked what other kinds of users they would like to have access to their information systems, Summit registrants identified community-based organizations and government agency partners.

Users Primarily Employ CSA Information Systems for Account Management and Data Management/Reporting

Based on responses to our pre-Summit survey and conversations at the Summit, CSA practitioners, families and other partners primarily use CSA information systems for the following functions:

**Account Management**
- Opening, closing and managing student accounts
- Interfacing with bank, credit union or other financial institution partner; tracking account activity
  - Aggregating data from multiple financial institutions
  - Managing the child-level details and account values for CSA programs that use omnibus 529 accounts
  - Allowing families to see both beneficiary and family-owned account with the same log-in
- Providing a portal for families of participants to view account data, enter data and access online resources
  - Holding documents associated with student accounts
  - Managing family account access, i.e. resetting password and/or creating usernames
  - Assisting families to go online to view account balances and statements and to track transactions and other account activities
- Providing account alerts
- Enabling families to link their accounts via the portal and later track their activity

**Data Management**
- Importing child data from school systems or other sources
- Facilitating surveys of participants
- Configuring the system to store additional information about children, families, funders, etc. as needed
- Allowing administrators to view an individual family dashboard
- Allowing families themselves to view account information

**Reporting**
- Allowing administrators to download customized reports and track progress
- Providing a query and reporting engine to enable staff to view savings patterns and analyze outcomes

**Other**
- Providing messaging to participants via email and text messages
- Allowing administrators to add calendar events and educational content
- Creating customer service tickets for portal-related issues or questions
The Most Commonly Used CSA Information Systems are Outcome Tracker by VistaShare and Microsoft Excel

CSA programs use a range of systems for managing programmatic information. As part of its annual survey of CSA programs, Prosperity Now queried CSA programs about technology and information management.\(^1\) This survey, based on a broad sample of 45 CSA programs, finds that Outcome Tracker by VistaShare (36%), a technology platform designed for matched savings programs, is one of the information systems most commonly used in the CSA field. An equal share of CSA programs (36%) utilize Microsoft Excel to manage program information. A smaller number of programs (2%) use InvestCloud, a leading provider of investment tools whose digital solutions have been adapted to support CSAs. Administrators often manage participant data outside of account-related information, such as tracking participation in financial empowerment programming. For example, Oakland Promise uses Salesforce to track participation in its financial coaching program.

![Data Collection Platform Used by Programs](image)

CSA Practitioners Want Additional Information System Functionality

In an emerging marketplace characterized by a fair amount of workarounds and few products designed specifically for CSA programs, CSA information system users desire additional functionality. In the pre-Summit survey and in discussions at the Summit, information system users identified a number of “pain points” in current systems:

**Back Office**
- Program administrators require significant onboarding to effectively manage the back office
- Staff must input data manually, especially around incentives
- Administrators have had difficulty in automating data reports

User Interface

- Systems are not particularly family-friendly, requiring families to register using information they may not have on hand
- Few systems are designed for a mobile user; no program has its own branded app
- Most systems are only available in English

To improve the efficiency and user-friendliness of their information system, CSA practitioners want the ability to perform additional information management functions, including:

- Having the ability to link accounts from multiple financial institutions (e.g., community banks, credit unions and 529 accounts) to a single CSA platform
- Tracking attainment of milestones and initiating automated transfers of incentives upon milestone completion
- Creating dashboards and other data visualization tools for school administrators and financial institutions
- Linking to additional content related to family goal setting, post-secondary success, etc.

In summary, when viewing CSA information systems from the demand side, a couple of key findings emerge:

- There are multiple CSA information system options available to users, though all lack some key functionality. The number of information systems in place in a new and relatively young field (65 total CSA programs nationwide, according to Prosperity Now’s State of the Field 2018 report) is varied. Outcome Tracker and Excel are the most common, but the range of solutions includes everything from self-built to proprietary systems.
- No perfect system yet exists. All practitioners report making trade-offs in their information systems, and the experience to-date reflects not what is ideal, but rather:
  
  a) What’s available in the financial services or information technology industries
  
  b) What CSA programs can afford.
The other way to explore information systems is to examine the system providers, how they operate, and what their needs are. At the Summit, participants also explored CSAs and information systems from this supply side. As noted above, CSA programs currently use a range of information management systems. Reflecting this variety, representatives from VistaShare, Opportunity to Assets and EARN² participated in the Summit and shared their experiences. Summit participants also had the opportunity to hear from technology providers with an interest in the CSA space, including Save Daily and Pax Finance. What follows are some key findings about the marketplace for CSA information systems.

Several MIS Providers Have Carved Out a Leading Role Within the CSA Market

Though limited, CSA practitioners have some choice of MIS providers. Having multiple providers allows programs to consider what partner might be a better fit based on program model, population, and level of interaction with participants. Moreover, in this early stage of the CSA movement, it also reduces the burden of one MIS provider having to design a system with the capacity to serve the hundreds of thousands of children enrolled in a multiplicity of CSA programs across the country.

Based on conversations at the Summit and Prosperity Now’s extensive knowledge of the CSA field, we have identified and describe below four primary information systems providers that support CSA programs:

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² EARN is not currently an information system provider in the CSA field, but the organization has deep experience with savings strategies and financial technology, and the CEO, Leigh Phillips, is a former CSA practitioner and key advisor to the CSA field.
### VistaShare Outcome Tracker

**OVERVIEW**
Outcome Tracker (developed by VistaShare) provides an online platform designed specifically for IDA (matched savings programs) and CSA programs.

**EXAMPLES OF CURRENT PARTNERS**
- Promise Indiana (Indiana)
- College Kids (St. Louis, MO)
- NYC Kids Rise (New York)

**KEY features**
- Built on the management information technology that originally served as recordkeeper for many adult matched savings programs
- Allows for recordkeeping and reporting of program incentives, including savings matches
- Designed to support opt-out and opt-in enrollment models
- Supports bank/credit union partners, or a 529 Plan (via an interface with Ascensus College Savings)

**LIMITATIONS**
- Designed to support a single financial institution provider; building out integration with PLAID to support multiple FIs
- Online registration process requires confidential data that may be onerous to participants’ families to locate, such as a student ID
- Participants can only view static account information and cannot make a deposit directly from the portal

**AVAILABILITY TO NEW CSA PROGRAMS**
Currently available to programs.

### InvestCloud

**OVERVIEW**
InvestCloud is a global firm that provides cloud-based financial solutions and makes use of digital financial integration to display account information for clients. InvestCloud’s platform can be customized to support CSA programs.

**EXAMPLES OF CURRENT PARTNERS:**
- Fund my Future (Pittsburgh, PA)

**KEY FEATURES:**
- Allows the participant to choose their financial institution and link their account using a data aggregator
- Offers additional integrated digital platform content to programs
- Participant user interface is designed for mobile access
- Designed to support an opt-in model

**LIMITATIONS:**
- Some financial institutions data security does not allow linkage via data aggregator or linkage may be interrupted, causing potentially lengthy delays in gaining access to account information.
- Requires participant’s parent or guardian to have/open their own account and link that account to InvestCloud
- Untested capability using an automatic enrollment model where the program administrator provides account information

**AVAILABILITY TO NEW CSA PROGRAMS:**
Currently available to programs.
**My529**

**OVERVIEW**
529 college savings plan (formerly Utah Education Savings Plan) that developed a suite of administrative tools to manage CSAs, eliminating the need for a separate IS.

**EXAMPLE OF CURRENT PARTNERS**
- Oakland Promise (Oakland, CA)
- I Have a Dream Foundation (serving CSA sites in New York City and Boulder, CO)

**KEY FEATURES**
- Allows participants to view investment growth over time
- Able to track and report on specific benchmark incentives
- Allows CSA programs to own accounts for designated beneficiaries; parents are not required but have the option to open a separate parent-owned account
- If families have their own account, participants can link a parent-owned 529 account to their child’s sponsor-owned account
- Program materials are available in Spanish

**LIMITATIONS**
- Only available to programs that also select My529 as the financial institution partner
- Families that own a different state’s 529 account cannot link to My529
- Limited ability to track non-financial data over time, e.g. parent’s participation in a financial coaching cohort

**AVAILABILITY TO NEW CSA PROGRAMS**
Currently available to programs.

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**CitiBank Start Saving Portal**

**OVERVIEW**
CitiBank developed the Start Saving Platform to be a single-system management system providing both the account and IS functions for the San Francisco CSA program.

**EXAMPLE OF CURRENT PARTNER**
- Kindergarten to College (San Francisco, CA)

**KEY FEATURES**
- Provides a “closed loop” system for all banking and management functions on one platform
- Creates individual profiles to retain all documentation electronically
- Automatic one-day account record opening reduces the lag time between the participant's account being opened and families being able to start saving
- Participant portal allows families to view activity; building out the ability to make deposits online

**LIMITATIONS**
- Currently exclusive to Kindergarten to College
- Limited to Citi’s Start Saving Account vehicle

**AVAILABILITY TO NEW CSA PROGRAMS**
Considering interested states and municipalities for future expansion.
Current Providers Must Balance the Demands for Customization with System Costs

Given the lack of standardization across the CSA field, all programs require a certain degree of customization in the development of their MIS beyond the basic technology infrastructure. Because some of this customization is fairly routine, current information system providers have created a standard scope of services for their customers. For example, these basic infrastructure features that MIS providers have created can be replicated across CSA programs:

- New participant or cohort enrollment
- Management portals for program administrators to pull reports
- Account management procedures, including seeding accounts, adding incentives, etc.

These essential services do not require MIS programmers to edit individual features. What’s more, these features look similar across programs that use the same MIS. For example, the administrator view in VistaShare of an individual student's account (below) is standardized across programs using the VistaShare platform.

(Image provided by St. Louis College Kids)

However, while these administrative functions do not require significant customization—which keeps costs lower—the participant-facing functions of a MIS may require additional customization. From integrating program branding and messages to providing financial education content, most CSA programs want to create a strong “look and feel” or brand for their program participants. This requires MIS providers to spend time and resources to customize their platforms for each program, which has cost implications for the programs.
One example of this type of MIS customization in VistaShare is the participant view in the College Kids program in St. Louis, Missouri, shown above. Both the program logo and the links to financial education curriculum were customized for College Kids. MIS providers may offer the ability to customize (with associated costs) in the following areas:

- **Portal Registration**: the participant information required to register for online access
- **Program Branding**: logos, specific colors and themes
- **Program Messaging**: reminders to participants, descriptions of program components
- **Program Content**: financial education curriculum, online quizzes and videos, participant surveys
- **Communications**: ability to send notifications, emails or SMS to participants

Many of the needs in the CSA field are not too difficult to solve. In fact, many of the MIS challenges faced by CSA programs have been solved by financial technology firms and are common in online banking, such as mobile-friendly registration. However, fintech firms that have placed a premium on user experience are typically able to do so because their participants are paying customers. Technology firms can recoup the resources spent on development either through a fee per user basis or through contracts with major financial institutions. In contrast, CSA programs are designed as low- or no-fee programs with an emphasis on helping low-income families access savings vehicles. Without a fee from users to defray the development expenses, MIS providers need to pass that cost on to CSA programs, which are often managed by nonprofit organizations or government entities with limited budgets.

Finally, this tension between a desire for customization and cost also creates a certain barrier to entry for new technology firms with an interest in the growing CSA field. At the Summit and in other conversations, Prosperity Now staff often hear a request from fintech firms to just provide them with the program specifications that cover “90%” of the information systems needs of any CSA program so that they might develop—in a cost-efficient manner—a technology solution for the field. Given the current variety across CSA programs, though, there is not yet a simple answer to this question.
To Improve the Information Systems Marketplace, the CSA Field Needs to Develop a Stronger Business Case for Potential Providers

At the Summit, we were joined by several potential technology providers who have an interest in serving CSA programs, as well as other general technology experts. Participants discussed the need to create a robust market in which providers would compete to provide services, thereby elevating the level of services offered and/or reducing the cost to providers.

Representatives from technology firms and start-ups discussed the need for a stronger business case to jump into the CSA space. The business case for providers who currently service CSA providers may not be sufficient to entice new companies interested in the market. One small group session at the Summit identified the following questions to help build the business case:

• What potential economies of scale exist in the field? The cost per user on a program serving a few hundred students is exponentially higher than serving tens of thousands.
• What opportunities are there for multiple programs to be served by one system? This would require adoption of one or more of the following—similar or identical program models, common definitions and common program metrics.
• What are potential opportunities for earned revenue for technology firms? For example, many financial management or budgeting apps that are free to the end user are subsidized by displaying banner advertisements. Alternatively, are there other sources of funding, outside of individual program budgets, that could be leveraged to defray start-up costs?
• What is the return on investment for MIS providers?

In summary, when viewing CSA information systems from the supply side, a couple of key findings emerge:

• **Though not perfect, the current information system offerings for CSA programs have been critical to the growth of the field.** The CSA information systems marketplace has been developed by a small number of providers and programs who have invested significant time, talent and resources over the last two decades to move programs toward a dedicated CSA infrastructure—i.e., beyond tracking participants on a spreadsheet. The contributions of early innovators, such as VistaShare, Kindergarten to College and Citi, are hard to overstate and have enabled the field to grow and succeed.

• **At present, there is not a competitive CSA MIS marketplace.** MIS providers have not had to compete for business in the way they might in a competitive market. The combination of relatively few providers, the exponential increase in programs and the lack of profit potential relative to cost for providers has resulted in an uncompetitive marketplace where programs choose from among a limited number of providers.

• **The need for deeper investments in CSA information systems is clear.** One way to encourage deeper investments in CSA information systems would be to develop a stronger business case for CSAs. This could help spur innovation among current providers and engender interest from new financial technology firms. The critical steps toward developing a compelling business case include a) coalescing around common metrics, thereby reducing some customization needs; b) raising funds dedicated to infrastructure needs to defray development costs; and/or c) identifying the potential value to providers not currently in the marketplace. Another path to deeper investment in CSA information systems that would rely less on a direct business case would be to attract either: 1) technology firms with more patient venture capital, 2) firms large enough to cross-subsidize a line of business focused on CSA information systems, or 3) mature firms for which CSAs will always be a loss leader, but add other value.
Looking Ahead

Using technology to organize, evaluate, efficiently manage and share programmatic data is a key function of any CSA program. Based on insights from CSA practitioners, technology providers and financial services firms over the past year and additional research by Prosperity Now staff, we perceive one primary challenge and one primary opportunity for CSA programs in meeting their future information management needs.

The Challenge: To Create a More Robust Marketplace for CSA Information Systems, the Field Needs to Engage More Financial Services Vendors and Financial Technology Firms

At the CSA Information Systems Summit, participants were clear that there is a need to engage more potential information systems providers, including experts/firms that have already created successful solutions. Given the economics of the CSA field—which is growing rapidly, but still relatively small-scale, with accountholders from under-resourced households—it is important to remember that it may be difficult for vendors to recoup their start-up costs and make money initially.

This is why it is critical to identify and attract potential providers with a long-term view and an appetite for patient investment. To make the case for investment, CSA advocates will need to, first, strengthen and grow the CSA field so that it is clearly recognizable as a market (and one that includes common definitions and metrics for success) and, second, create a clearer vision of the size and scope of the CSA marketplace going forward. In doing so, CSA advocates will need to be careful about what they are envisioning or promising about the future market value of CSAs. In particular:

- Be cautious about both over promising and undervaluing.
- Be clear about the value to financial institutions, financial services firms and other vendors, including possible Community Reinvestment Act credits.
- Be clear about how the field can best support families that are most in need, and that profitability for CSA vendors is not the ultimate goal for CSA programs.

The Opportunity: Standardization in the CSA Field Can Lead to New Market Opportunities

Standardization across programs—creating common definitions, metrics, and principles—can advance the field. This creates an opportunity to build a framework of common “base architecture” for information management as existing and developing programs adopt the standards. If a common base architecture reflecting CSA standards could be developed, current MIS providers could offer increased functionality with optional adaptation, rather than a completely individualized customization for each program. Programs will always need individual customization for features like program branding. However, MIS providers could reduce the one-on-one development time with programs by building on a common architecture.
Increased standardization could also engender interest from new potential providers by articulating defined system needs and the technology required to deliver it. Paired with a clear business case, potential providers would understand the market, the opportunity and the costs to build a new system. New players in the market would be able to easily identify:

- The technology capacity needed to operate a CSA MIS, and whether their system can meet the need
- The cost per user to offer the system as is, or the cost needed to adapt their product
- The opportunity to add value to the CSA program(s) through vendor-specific features, e.g. mobile-friendly educational content, streamlined user registration, or integration of financial data

Finally, standardization allows the field to think long-term about the potential of CSAs as a tool to help all families build assets for the future. Given the substantial energy around college savings at the municipal, state and federal levels, the field should be thinking about an infrastructure that has the capacity to serve families on a larger scale, potentially across the country. Moving toward standardization creates opportunities for better integration amongst local programs operating in the same state or region. Eventually, if the vision for federal policy to support CSAs becomes a reality, there will also be a need for a MIS that has the capacity to service a nationwide CSA program.