



Achieving financial well-being with Big Data for a leading philanthropic mission

The path to financial stability starts with emergency savings. However, an increasing number of Americans, especially those earning low-to-moderate incomes, are finding it increasingly difficult to survive in today's highly unpredictable world. To enable these households to build a crucial safety net, the client approached us to develop an agile data analytics system for their Emergency Savings Initiative (ESI) that can help them seamlessly consolidate complex data sets from multiple sources and produce actionable insights into the financial lives of Americans.

Client in spotlight

Our client, via its foundation, has pledged a generous \$50 million over multiple years to assist low-to-moderate-income households throughout the United States of America. The Social Impact team has partnered with industry experts, including the Common Cents Lab, Commonwealth, and Financial Health Network, to effectively address the savings crisis. The ESI program is a cross-sector initiative designed to provide proven savings strategies and tools to those on low-to-moderate incomes, allowing them to access and increase their usage. Emergency savings, which are liquid savings that can be used in an emergency, are crucial building blocks for achieving greater financial health.

◆ FUN FACT



50% of the financially vulnerable—a group disproportionately composed of people of color—reported that their financial situation had worsened during the course of the pandemic, as opposed to just 6% of the financially healthy.

Key challenges

- 01 Consolidating multiple data sets in complex and unique formats and generating insights to inform decision-making was a bottleneck for the foundation.
- 02 Lack of agility and scalability hampered the foundation's ability to drive desired results.
- 03 The foundation faced a challenge in unlocking real-time insights to gain improved visibility into the financial health of American households.

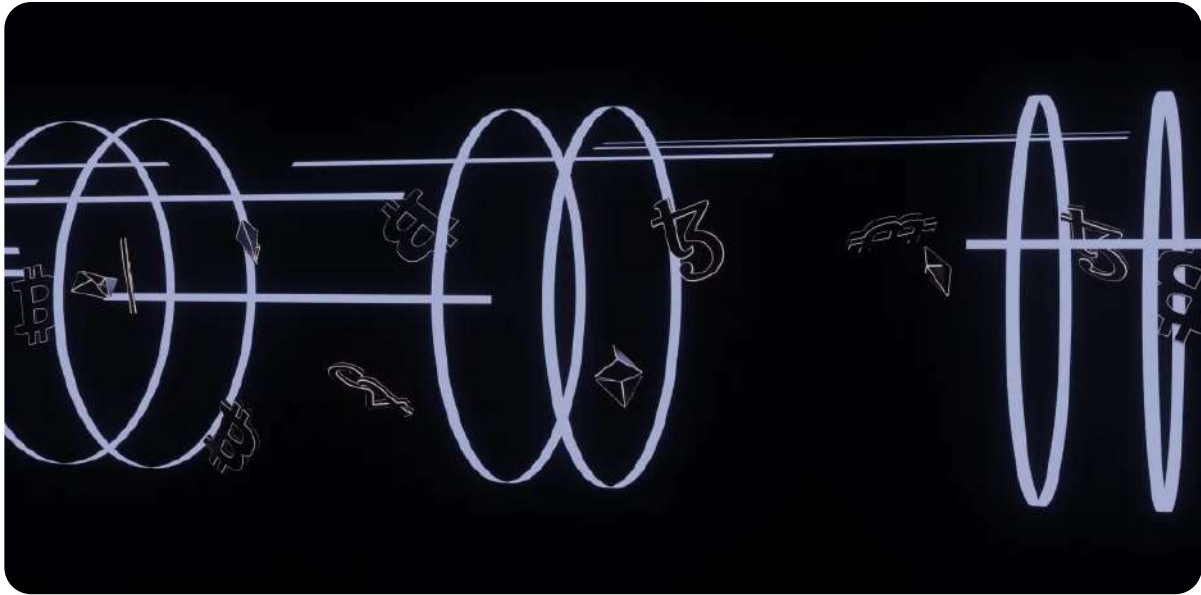
Solution

The Kellton team delivered consulting, product development, and software engineering services over the lifespan of this project. Our developers first firmed up the technical architecture and design of the ESI platform with an in-person kickoff workshop. The team leveraged **Amazon S3 cloud storage**, **AWS Athena** for data querying, **AWS Glue** for ELT automation, and **Python** for data processing.

The code our team created aggregates and transforms monthly financial data into deep insights that further empower a growing ecosystem of employers, recordkeepers, payroll providers, financial institutions, and fintechs who want to help employees, and consumers save.

The project involved multiple stakeholders, and our project managers developed a detailed roadmap and frequently met with the client to ensure seamless communication between all parties. The platform was built using **agile methodology**, with a demo session every two weeks to showcase the latest deliverables and receive feedback for future iterations.

Our team continues to support the client as they onboard new data providers. This has resulted in an **ever-improving insight into Americans' savings health** and behavior, from which ESI and its partners can take action to **improve financial outcomes** across the United States.



Insights and impact | The rise of data utilization in assessing public financial health

Data utilization to gain insights into **public financial health** has emerged as a significant trend in recent years. Governments and financial institutions are increasingly **leveraging data analytics** and **advanced technologies** to assess and monitor the economic well-being of societies.

By **analyzing various financial indicators**, such as GDP growth, inflation rates, employment data, and consumer spending patterns, data-driven insights can be obtained to evaluate an economy's overall health and stability.

Financial experts and institutions can make informed decisions, **predict economic trends**, and implement targeted interventions to support public financial health. The utilization of data-driven insights in assessing public financial health is set to continue expanding, providing valuable information for **economic planning, risk management, and policy formulation**.

Future-proof

Data analytics system for crucial insights

Accelerated

Decision-making capability to improve short-term saving outcomes and financial security

Seamless

Data analysis and consolidation, accessible to multiple stakeholders