

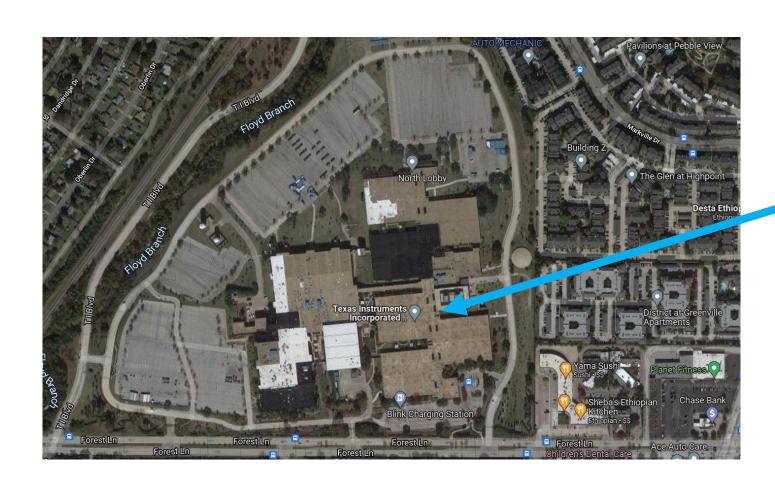


Point Clear, AL



VOICE AUTHENTICATION | FRAUD PREVENTION

My Introduction to Credit Unions







Milluma Homeland Security Success Story



ach year, Americans lose an estimated \$10 billion through phone scams, as reported in research from TrueCaller.

Whether scammers claim they are from the Internal Revenue Service, a credit card company, or a host of other hypothetical entities, nearly one in six Americans reported losing money to phone scams in 2017, an almost 70% increase over the previous year. Scammers target individual consumers as well as large financial institutions, who have a growing problem with criminals stealing identities to take over legitimate customers' accounts and commit fraud. With help from the Department of Homeland Security (DHS) Small Business Innovation Research program (SBIR), Illuma Labs has developed a tool to outmaneuver these fraudsters.



Call Volume is Rising and Member Experience is Suffering



Chris KearneyCIO, TruWest Credit Union

"One of our key challenges is a significant increase in call volume. It's hard to authenticate members over the phone without it feeling like an interrogation. We need to give contact center agents tools to serve and protect members without creating an uncomfortable call experience."



Authentication is Impacting Average Call Handling Time



Craig Stancher
Member Experience Manager
Connexus Credit Union

"Standard authentication is time consuming for agents and members. Out of pocket questions take, on average, 90 seconds per call. Extrapolate that to thousands of calls per year, and it's a massive time commitment for employees and members."

Fraudsters Are Getting Better at Security Questions



Katie McAtee
Contact Center Manager
TruWest Credit Union

"On some occasions, we would get someone coming through that wasn't the member. They would do social engineering to discover more of the right answers and then call back and get a different agent. This problem is happening now, and it's getting worse."

Illuma Today



Customers, Investors & Partners

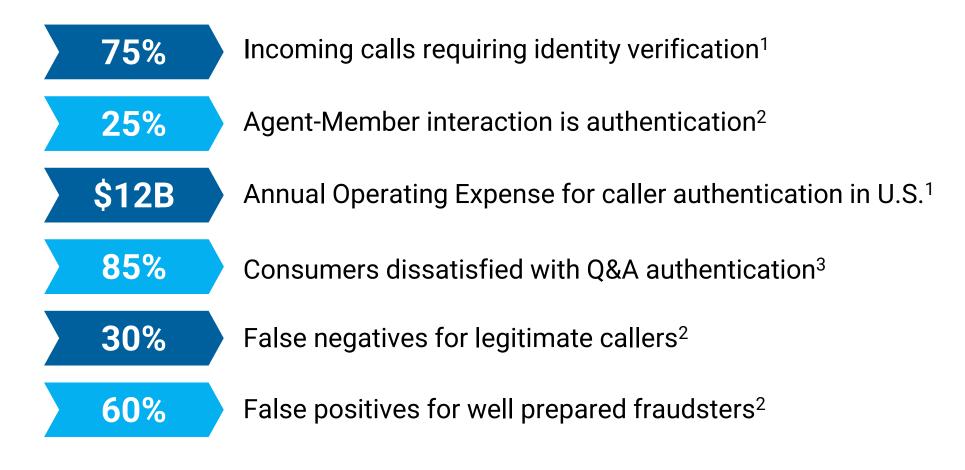
- 100% US Based Credit Union Service Organization (CUSO)
- \$2M contracts with US Department of Homeland Security
- \$6M investment from Credit Union industry
- Winner at VentureTech, CreditUnions.com Innovation Series, NACUSO Next Big Idea
- Exclusive provider for CUNA Strategic Services & endorsements in 34 states



Intellectual Property

- 3 patents, additional pending
- Trade secrets

Knowledge-Based Authentication is Broken



- 1. Johnson, Alicia. "25 Stats That Indicate the Recent Trends in Contact Center Industry." Blog post. Fusion BPO Services, 2014. Web.
- 2. Litan, Avivah. Absolute Identity Proofing Is Dead; Use Dynamic Identity Assessment Instead. Gartner, Inc., 16 Nov. 2015
- 3. Authentication: There's Got To Be a Better Way. NICE Systems

WW-illuma Fraudsters are Attacking Call Centers



Types of Authentication

What You Know

- Out of wallet questions
- Recent transactions

What You Have

- One-time passcodes
- Mobile apps

Who You Are

- Voice biometrics
- Face biometrics

Milliuma Active vs. Passive Authentication



Active Authentication

- Prompts member to take specific actions for authentication
- Adds friction & tarnishes member experience

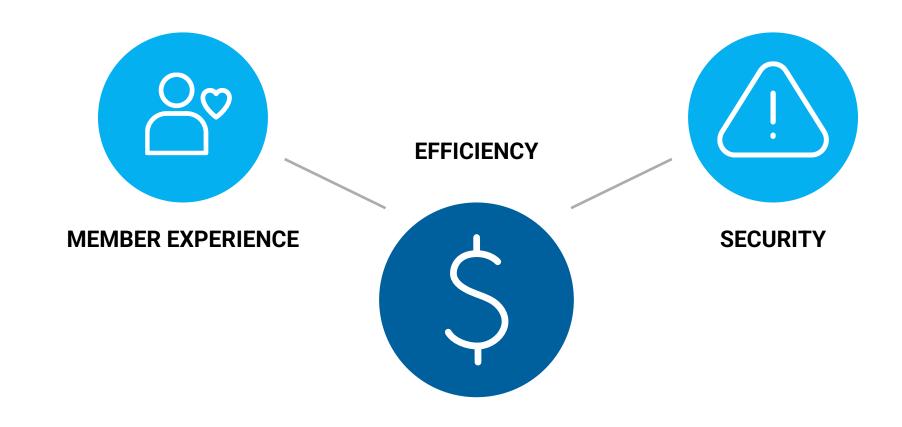


Passive Authentication

- Authenticates member over natural engagement
- Eliminates friction & improves member experience

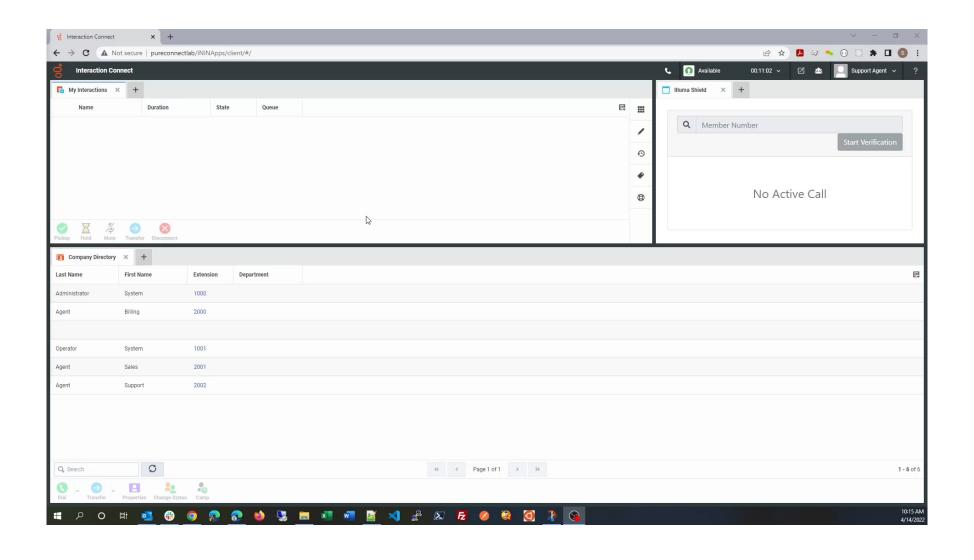
Passive Voice Authentication

Bring The 'Brick & Mortar' Member Experience To Your Contact Center



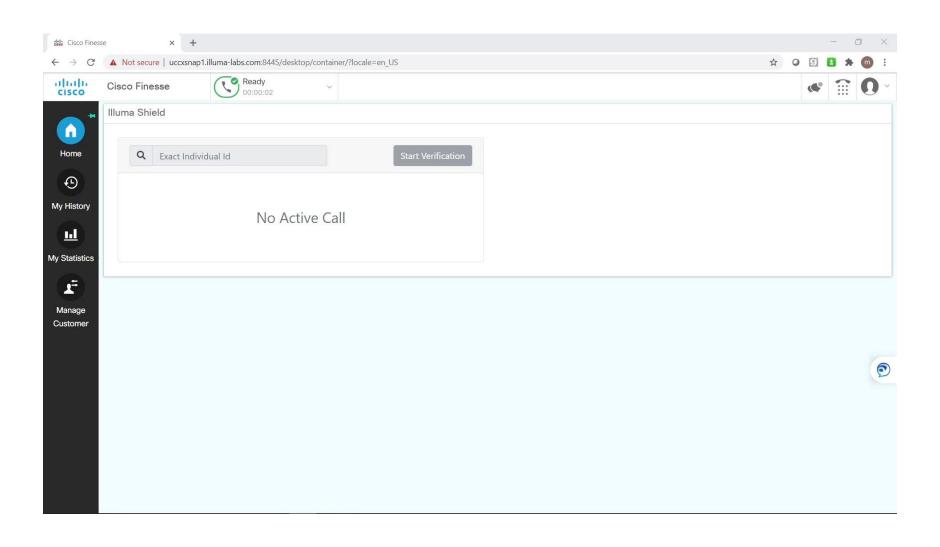


Frictionless Authentication

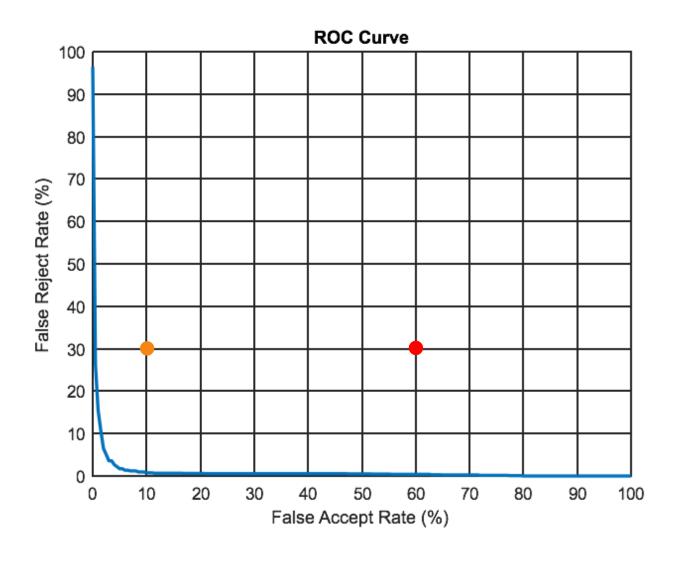




Easy Enrollment



Passive Voice Authentication



Authentication Accuracy

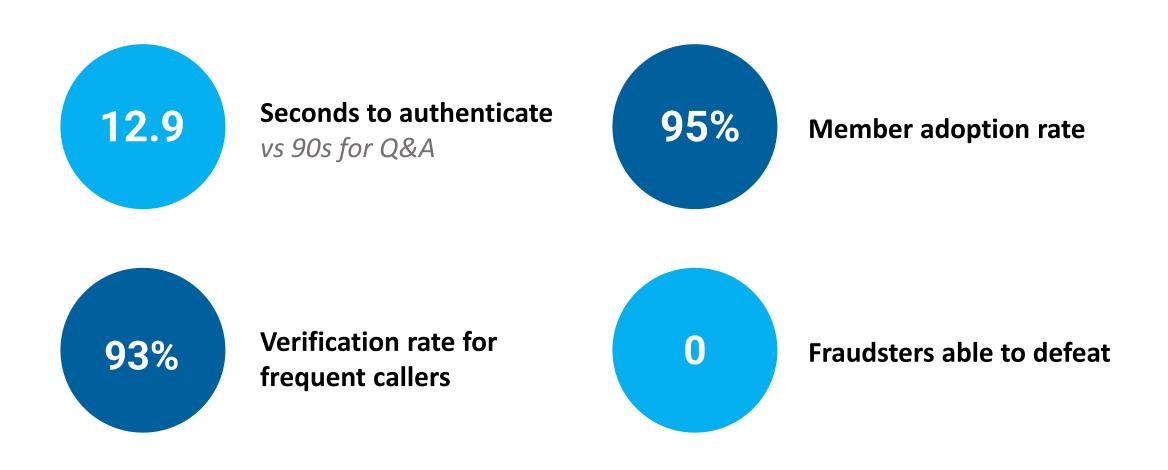
- Human Recognition of Familiar Voices²
- Knowledge Based Authentication¹
- Passive Voice

¹ Litan, Avivah. Absolute Identity Proofing Is Dead; Use Dynamic Identity Assessment Instead. Gartner, Inc., 16 Nov. 2015.

² Foulkes, Paul, and Anthony Barron. "Telephone speaker recognition amongst members of a close social network." Forensic linguistics 7 (2000): 180-198.

Passive Voice Authentication

Immense Value for Credit Unions and Members





Success Stories

2022 CASE STU

TDECU ENROLLS OVER 50,000
MEMBERS IN VOICE ID VERIFICATION
PROGRAM IN 9 MONTHS

OVERVIEW

TDEGU began in 1955 when seven DOW employees each pitched in to loan a friend \$5 to help with the purchase of a refrigerator. Over the decades, TDECU has grown to meet the needs of communities across SouthEast Texas and provide value to financially underserved areas. Today, the Houston-based credit union has 37 service locations, manages over \$4.5 B in assets, and continues its purpose to help members navigate their financial journeys while providing exceptional service.

CHALLENGE

TDECU was seeking to provide a better call center experience for members. They faced the common problem of balancing security with convenience. Traditional authentication methods were placing a roadblock in the way of excellent service.

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2021 CASE STUD

TRUWEST CREDIT UNION
CONTACT CENTER CUTS MEMBER
AUTHENTICATION TIME BY 84%

OVERVIEW

Originally founded in 1952 as a cooperative for Motorola employees, TruWest has evolved and organized from the years to serve a broader range of \$3,000 members across communities in Texas and Artzona. This credit union has worked diligently to stay at the forefront of new services and solitons, including being first flot to lot often one-top author bopping. Today, they corganization is taking a tech-friendly digital approach to providing a convenient and secure-to-gradience. One too onal is ensuring members feel welcome and confident in every interaction.

CHALLENGE

With COVID limiting branch access, call center volume increased substantially, putting pressure on agents to handle calls more efficiently. Since members couldn't be visually recognized and validated on the phone as they would be in person, authentication was achieved through traditional out-of-wallet questions. TruWest recognized that putting members through an awkward and uncomfortable Q&A was causing friction and frustration. The process took about 90 seconds per call, increasing call handle time without adding value to the conversation.

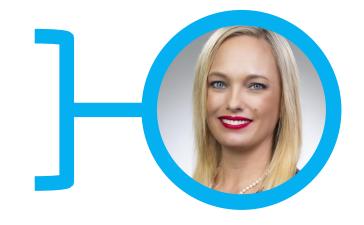


"It's really added more security allowing team members to get to member concerns faster. When a member calls in, they have something they want resolved. Instead of asking a couple of minutes of questions verifying their identity, we can use Voice ID Verification to shortcut that process and get straight to the member's issue"

Carolina Ayerdis, Senior Member Experience Manager, TDECU

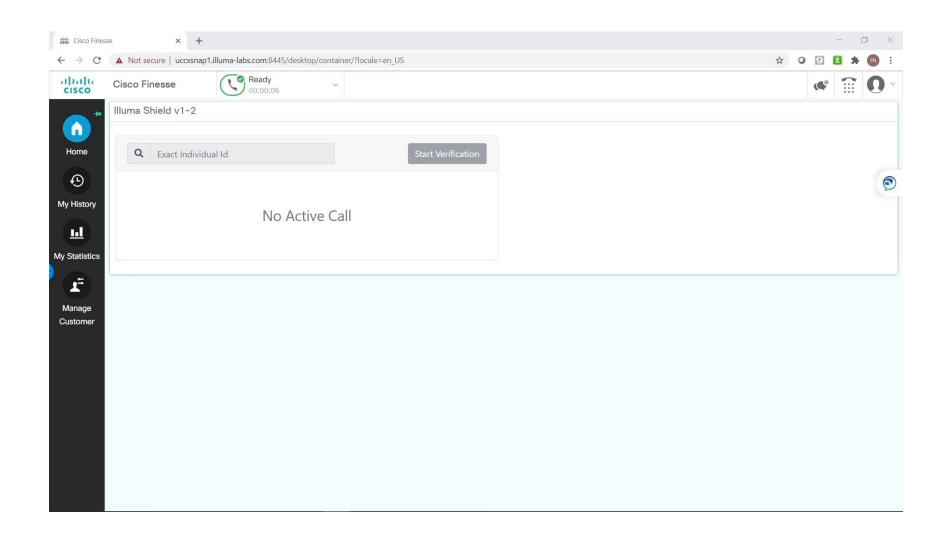
"Feedback from our agents has been 100% positive. It's easy to use and when they are signing people up, members don't have to do anything but just say yes"

- Katie McAtee, Contact Center Manager, TruWest





Fraudster Detection





Milluma Passive Voice Authentication: Client ROI

		Year 1	Year 2	Year 3
Operational Benefits	Savings in Average Handle Time (seconds)	47.05	53.32	59.59
	Savings in Labor Costs (\$)	\$117,100.40	\$143,948.01	\$174,501.82
	Savings in 3rd Party Authentication Costs (\$)	\$147,103.13	\$175,052.72	\$205,429.51
Security Benefits	Savings in Fraud Losses (\$)	\$50,000.00	\$52,500.00	\$55,125.00
Member Benefits	Value of Members' Time Saved (\$)	\$96,370.28	\$118,465.10	\$143,610.01
Combined Benefits	Gross Value Generated by Illuma Shield (\$)	\$410,573.81	\$489,965.82	\$578,666.34



M/M-illuma Preference vs. Reality of Contact Centers





Voice Authentication in IVR



SECURITY MEETS SELF-SERVICE

Selecting a Voice Partner

Information Technology

Rapid & Low-Cost Implementation

Partner dedicated to CUs

Contact Center Operations

Simple Agent UI

Integrated into Existing Agent Tools

Member Experience

Zero Friction Experience

High Satisfaction & Adoption Rates

Risk and Compliance

Security of Personal Information

Member Consent Tracking





