



SPEECH ENABLED SOFTWARE TECHNOLOGIES

Biometric Authentication with Integrated Speech Technologies

Outline

- Growing need for online security
- Traditional authentication system
- Proposed authentication system
- Details of the proposed authentication system
- Scheme for the proposed system
- Comparison of traditional and proposed authentication systems
- Advantages of the proposed authentication system
- List of SESTEK Voice Biometrics Solutions
- Video: SESTEK Voice Biometrics Solutions

Increased Need for Online Security

- Growing adoption of smartphones and mobile devices let users make transactions anytime, anywhere.
- As use of electronic identities has grown, organizations depend more and more on the accuracy of the information those identities provide.
- Online identity theft and fraud arise as important issues of concern.

That's why;

**MORE SECURE AUTHENTICATION IS A
GROWING NEED**



Traditional Authentication System



Can I have your date and place of birth?

October 25,
1970 -London

Please say the first and last letters of your mother's maiden name?

B and N



SMS

- Manual identity verification with agents
- Fixed challenge questions with personal info easily found on the Internet
- Additional security layer: SMS

Proposed Authentication System



Please repeat:
My voice is my
password

My voice is my
password



What is the
name of your
favorite high
school teacher?



Martin



- Identity verification with voice biometrics
- Personalized challenge questions set by users
- Additional security layer: Outbound Call with TTS & SR integration

Details of the Proposed Authentication System

Identity Verification via Voice Biometrics

- ✓ Accurate identity verification via voice biometrics technology
- ✓ Biometric security measure which is impossible to impersonate
- ✓ Elimination of the need for live agents
- ✓ Higher security



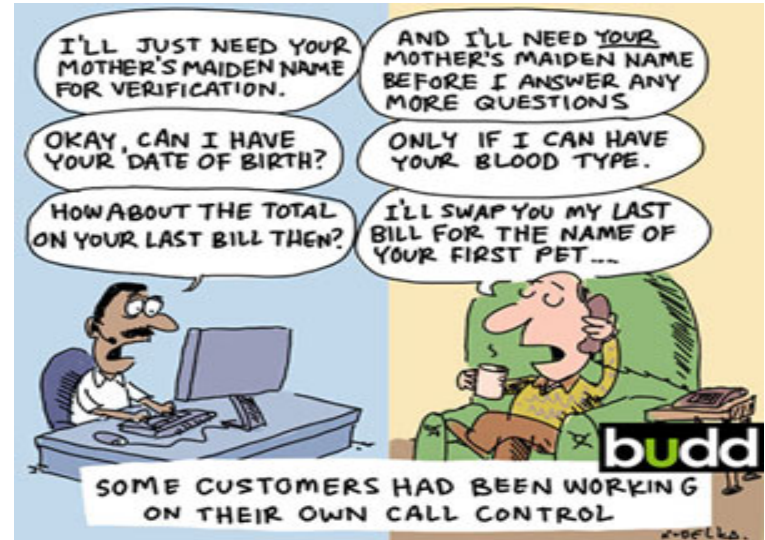
Details of the Proposed Authentication System

Personalized Challenge Questions & Answers

- ✓ Users can set their own challenge questions and answers

E.g. What is the last name of your favorite high school teacher?

- ✓ Personal information can not be found on the Internet
- ✓ Easy to remember
- ✓ Higher security



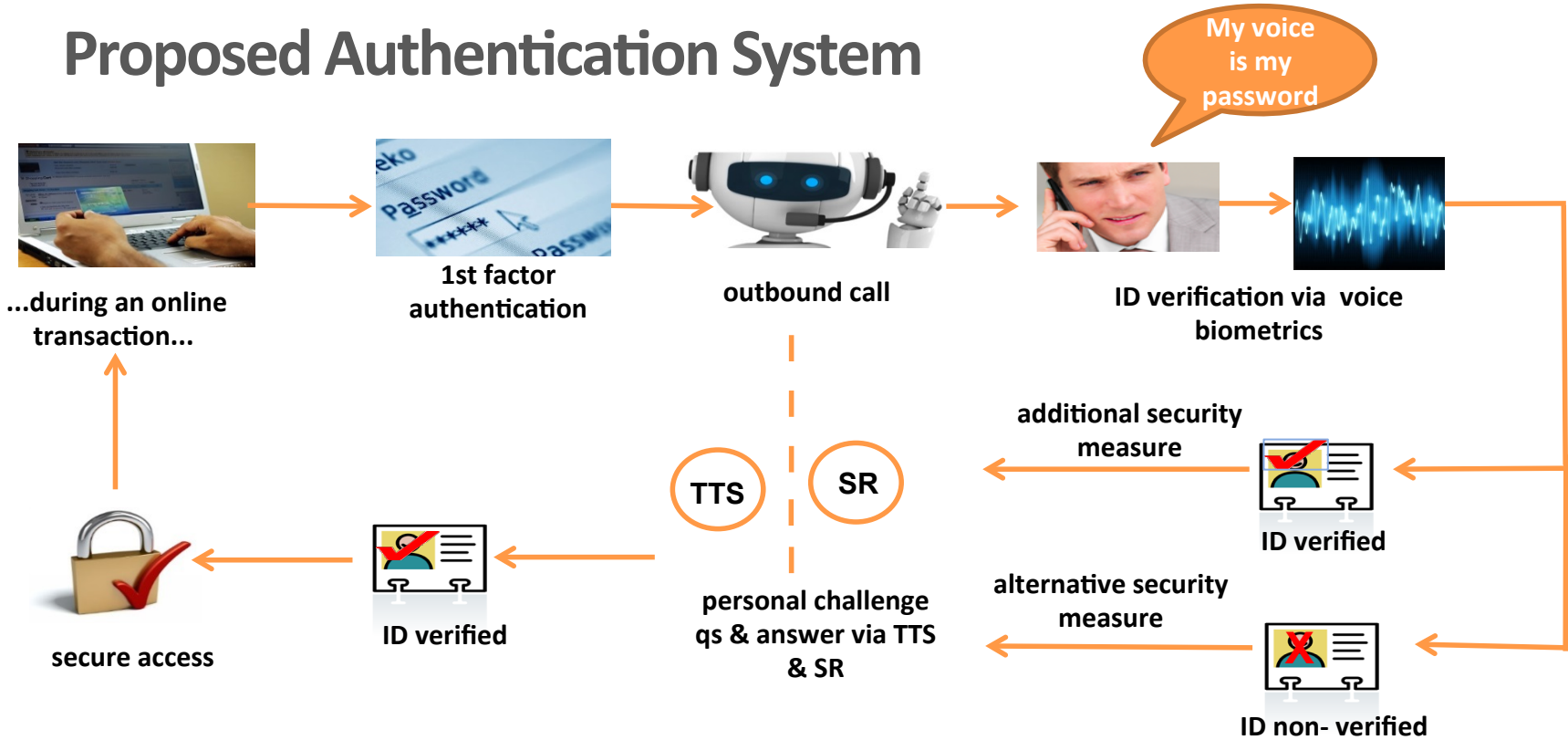
Details of the Proposed Authentication System

Speech Integrated Outbound Call













- ✓ Additional security layer with TTS and SR integrated outbound call
- ✓ Powerful alternative to SMS
- ✓ Ability to ask challenge questions via Text-to-Speech technology
- ✓ Ability to get answers via Speech Recognition technology
- ✓ Increased automation



Proposed Authentication System

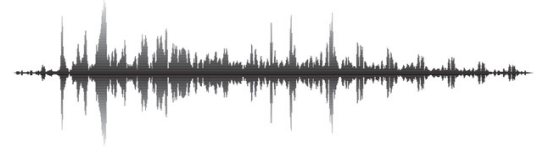
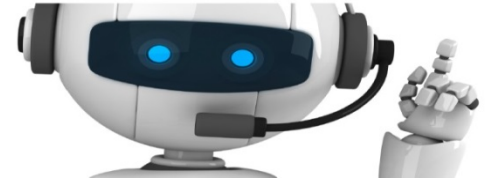


Comparison

Traditional Authentication Systems	Proposed Authentication System
Higher risk of fraud & identity theft 	Higher security 
Manual (agent-based) security 	Voice biometric security with TTS & SR integrated outbound call 
Time consuming authentication 	Fast and automized authentication 
Less effective security solution 	Effective security solution 
Average customer service 	Improved customer service 
Poor corporate image 	Better corporate image 

Why Proposed Authentication System?

- ✓ Multilayered authentication which combines voice biometrics with SR & TTS
- ✓ Strong alternative to traditional authentication systems
- ✓ Higher automation
- ✓ Increased efficiency
- ✓ Faster & safer transactions
- ✓ Enhanced customer experience
- ✓ Improved corporate image



SESTEK Voice Biometrics Solutions

Vocal Passphrase

Speech Enabled Password Reset

Speech Enabled Second Factor Authentication

Verification On-the-Go

Blacklist Identification

Mobile Device Authentication

VIDEO: SESTEK Voice Biometrics

A stylized illustration of a red tent at a night festival. The tent is decorated with yellow and blue triangular bunting. Above the tent is a large sign that says "GO AWAY" in bold, orange letters. The sign is illuminated by a ring of yellow lights. The background shows a city skyline at night under a starry sky. The ground is a mix of green and grey, suggesting a festival area.

GO AWAY

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THANKS FOR LISTENING...