

# **Automatic Speech Recognition Communication Applications**

## **A Cost-Effective Alternative to Captioned Telephone Service**

**November 28<sup>th</sup>, 2017**



**MOBILE TECHNOLOGY  
IS ENRICHING OUR  
LIVES.**

**IT PROVIDES A VOICE  
AND INDEPENDENCE  
TO THOSE WITHOUT.**

# Agenda

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- Introduction
- Savings Opportunity
- Speech2RTT® Communicator Features
- Speech2RTT® Communicator Features Demo
- How to Benefit from ASR-based Communication Solutions
  - RAZ Mobility and State Equipment Distribution Programs
  - Equipment Distribution Programs and Educating Consumers Regarding ASR Apps
  - Proposed Trial
  - FCC Should Encourage State Equipment Programs to Include Mobile Devices

# SAVINGS OPPORTUNITY

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- Free and low-cost Automatic Speech Recognition (ASR) based solutions provide exceptional savings opportunities.
- Per-person savings:
  - Assuming usage of 50 minutes per month, savings to TRS Fund would be approximately \$3,600 over three years (50 minutes X \$2.00 X 36 months).
- Total Savings to TRS Fund:
  - Assuming only 10% of relay traffic shifts to Speech2RTT, and other ASR apps, savings to the fund would be approximately \$75 million per year.

**ASR-based apps provide a potential for ~\$75 million per year savings even at a low, 10% adoption rate.**

## SAVINGS OPPORTUNITY & ASR-based Solutions

Presented by:  
**Robert Felgar,**  
**CEO**  
**RAZ Mobility**

[www.razmobility.com](http://www.razmobility.com)

# Speech2RTT<sup>®</sup> Communicator Application

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- Speech2RTT<sup>®</sup> Communicator is an Android OS mobile app that handles all of the following functions and processes **locally** on Android tablets/smart phones:
  - Speech recognition/transcription/in-context error correction;
  - Immediate, real-time, streaming of the text transcribed in step #1; and,
  - Two-way, real-time text communications.
- Enables people who are deaf, hard of hearing, late-deafened, and speech-impaired (with medium-fine motor control of their hands and fingers), to communicate with anyone, including people who can hear, speak, and see. Users are given the option of communicating using:
  - Speech to real-time text technology; or,
  - A virtual/physical/Bluetooth smartphone keyboard



**Speech2RTT<sup>®</sup>  
Communicator**

**An IDEAL Group  
Innovation**

Presented by:  
**Steve Jacobs,**  
President  
IDEAL Group, Inc.

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# Speech2RTT Communicator App Features

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- High-quality, low-cost, telecom application;
- Potential to offer significant savings to TRS Fund;
- Portable: No need for caption telephones;
- Private: No communications assistants (CAs) involved;
- Speech is transcribed into text in real-time;
- Automatically compresses the text being streamed, in real-time, for optimal bandwidth use;
- Fast: Less than 300 ms latency;
- Secure: Uses end-to-end encryption;
- No voice-training is needed, even with accents;
- Free local, national, and international communication;
- Streaming text will automatically “catch up” should there be an unstable network connection; and,
- There are no limits to the length of conversations.



**Speech2RTT  
Communicator**

## Speech2RTT Communicator App Features (cont'd)

- Instant availability at any time as no CAs are involved enables spontaneous and efficient communication.
- Customized Word Prediction Typing
- Speaker identification
- Multi-language support and worldwide availability
  - Supports English, Spanish, French, Mandarin, and 60 other languages  
(full list: <http://speech2rtt.com/features/>);
  - Available in the United States, Canada, Mexico, UK, France, Germany, and 88 more countries  
(full list: <http://speech2rtt.com/features/>).



**Speech2RTT  
Communicator**

# Speech2RTT Communicator Leadership Team

RAZ

Steve Jacobs  
Saurabh Gupta  
Robert Felgar  
Nermin Selimic  
Klaus Schafer  
Gunnar Hellström  
Kevin Dwinnell  
Katie Robinson  
Staffan Hellström



# RAZ Mobility and State Equipment Distribution Programs

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RAZ

- RAZ Mobility offers states an Android program, which includes equipment, training, support and mobile device management.
- RAZ Mobility has contracts for its Android program with Oregon and Wyoming. Contracts with Kentucky, Kansas and Iowa are expected in the first quarter of 2018. Additional potential states in 2018 include Minnesota, Colorado, Pennsylvania, North Carolina and Massachusetts.
- Speech2RTT® app will be pre-installed on Android equipment and made available to states at no additional cost.
- RAZ Mobility will train consumers on the use of Speech2RTT.
- RAZ Mobility will answer ongoing questions regarding the app.

Presented by:  
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# Equipment Distribution Programs and Educating Consumers Regarding ASR Apps

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- When state equipment distribution programs certify consumers for Relay service, they should educate consumers regarding free or low cost alternatives in the form of ASR apps.
- Education should include the names of available ASR apps, how they can be installed and advantages of ASR apps over Relay service.

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RAZ Mobility

## Proposed Trial

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- A trial can help the Commission obtain data on adoption rate and use of ASR apps.
- Trial would be conducted with cooperation of RAZ Mobility, IDEAL Group and state equipment distribution programs.
- After pre-installing Speech2RTT, and training the consumer, following information could be obtained:
  - What percentage use the application.
  - Of those who use, on average how often do they use each month (i.e., how many times per month do they open the application).
  - Length of time of the average chat session.

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Robert Felgar,  
CEO  
RAZ Mobility

# FCC Should Encourage State Equipment Programs to Include Mobile Devices

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- Use of messaging, email, video calling and social media will reduce dependence and use of relay service.
  - "While data usage is increasing, the annual voice minutes and the use of traditional SMS text messaging are decreasing. Many of the legacy wireless cellphone functions are being overtaken by Internet apps, such as Skype, FaceTime, WhatsApp and Facebook Messenger." -- *Commissioner O'Rielly, Twentieth Report on Competitive Market Conditions with Respect to Mobile Wireless*
- Distribution of mobile devices by state equipment distribution programs will also help promote other Commission objectives, such as narrowing the digital divide and supporting telehealth.

Presented by:  
**Robert Felgar,**  
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**Thank you.**



**Empowering people to overcome their challenges  
by providing pioneering mobile assistive  
technology and services.**

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