IPRO 344
Improving Energy-Efficiency
& Offering Quality Audio in
Mobile Devices & Intercoms
The Problem

- Lack of **standardized test data and methodology** for evaluating the audio quality of a two-way communication system performing in a high noise level environment.
Team Organization

Web
Minutes
Doc.
Research
Presentation
Circuit S.P.
Coordination
Purchasing
Kiosk
Tools & Media
Economic
Project Goals

- Improve audio performance of kiosk
  - Microphone placement
  - Equalization
  - Noise cancellation
- Gather empirical test data
  - Ambient noise interference
  - SII/STI standards
  - Human perception
- Establish standards for testing and results
- Refine kiosk and electronic hardware
  - Repackage SSM
  - Improve kiosk rear access panel
Decided on at least one standard of measuring, STI with the possibility of SII.

Parts for SSM have been ordered and received.

Acquired testing location in which kiosk may be set up constantly, so there is no time wasted setting it up and taking it down.
Progress, Continued
Obstacles Encountered

- Not enough real world data
- No base comparison
- Stand-alone programs for analyzing data
- Not enough time
- Controlling work space environment
Anticipated Challenges

- The compatibility of the CPG with the rest of the system
- Amount of time needed to conduct tests
- Copyright issues when representing data
- The availability of the testing location
- Expansion of proposed tests
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THANK YOU
Q & A