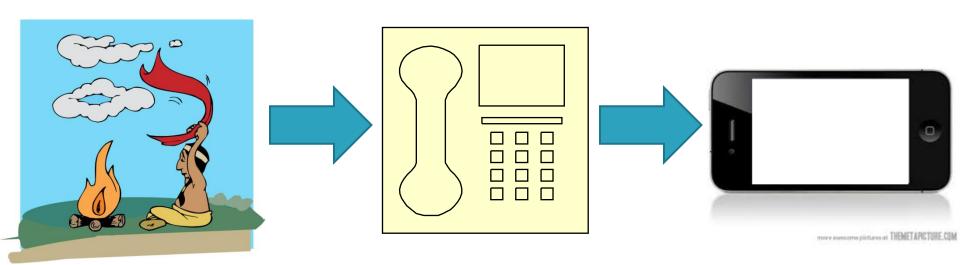
EXCHANGE OF AUDIO INFORMATION VIA WIRELESS TECHNOLOGY

Background and Introduction(1)

- √ The mobile phone has revolutionized communication.
- √ The smart phone has revolutionized the revolution.

Background and Introduction(2)



Background and Introduction(3)

√ What about short distance communication?



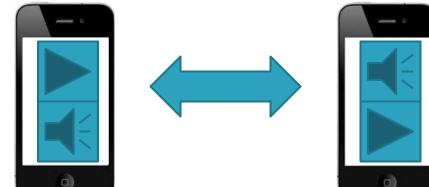
Problem Statement

✓ How can smartphones communicate with each other over short distances without incurring network service provider costs?

Objectives

✓ Two smartphones connect with each other via wireless without an intermediary device.

✓ Send and receive data — initially audio data — between the two devices.



Justification

✓ Smartphones are small computers. Therefore they should do what computers do. At least to some extent.

✓ Legitimate ways to cut costs are always welcome.

Literature Review in Short

Characteristic	NFC	Bluetooth	Wi-Fi
Range	≤ 10 cm	≤ 30 m	≤ 100 m
Advantages	Relatively very secure	Rather common	Long range
Disadvantages	Rather uncommon	Slightly insecure due to range	High power demands

Research Methods

- **✓** Experimentation:
 - Input: Code.
 - Tools: An IDE.
 - Output: An app.

- √ Web search:
 - Input: Questions.
 - Tools: Browser.
 - Output: Answers and code
 - snippets.

- ✓ Interviews:
 - Input: Prepared interview
 - Tools: Notebook and pen.

questions.

Output: Varying opinions.

Schedule

- ✓ Proposal takes 1.5 months.
- ✓ Literature review takes 1.5 months.

- ✓ Design takes 1 month.
- ✓ Implementation and testing take about 1 month.

Budget

✓ Internet connectivity: Kshs. 4,000

✓ TOTAL BUDGET: Kshs. 4,000 (Sunday, October 25, 2015)



Conclusion

✓ Humble beginnings.

✓ References at the back of the Proposal.

THE END. . . FOR NOW