Team 7 - CellSync Industrial Consultant Brief

Objectives

CellSync is a device aimed at integrating cell phone and landline technologies, creating a cheaper and simplified system that can replace home or office phone systems.

- The system would receive a call to a cell phone and transfer it to a set of land line phone handsets within the house.
- It would be able to make calls from the landline handsets through the cell phone service.
- Cell phone functions such as voicemail, text messaging, and voice activation will be implemented with the landline handsets.

The Team

From left to right: Phil Overbeeke, Jeffrey Enahoro, Keith Conrad, Andrew Stutzman, Matt Gardner

Design Overview
Cell Phone

- The cell phone can transfer data through a Bluetooth transmitter
- The data can also be transmitted through a hard wire directly to the encoder/decoder in the CellSync product.

Bluetooth Transceiver

- The Bluetooth transceivers will be in both the CellSync product and cell phone
- It would receive data and transfer it as Bluetooth signals between the cell phone and the CellSync product

CellSync Product

- The encoder/decoder transfers data between the land line base station and the Bluetooth transceiver
- The cell phone can also be hardwired directly to the encoder/decoder
- The encoder/decoder receives data from the cell phone and encodes it to a signal that can be received by the land line and receives the data from the land line and decodes it to a signal that can be received by the cell phone

Land Lines

- Data is sent and received by the land line base station
- Data can be transferred between the land line base station and wireless handsets or hardwired handsets

Status

Project Definition

- Problem defined
- Design overview established
- Considering design options

Research in progress

- Bluetooth protocol technology
- Private Branch Exchange (PBX)
- Cell phone signals
- Land line technology