

SPEECH-BASED ACCESS FOR AGRICULTURAL COMMODITY PRICES

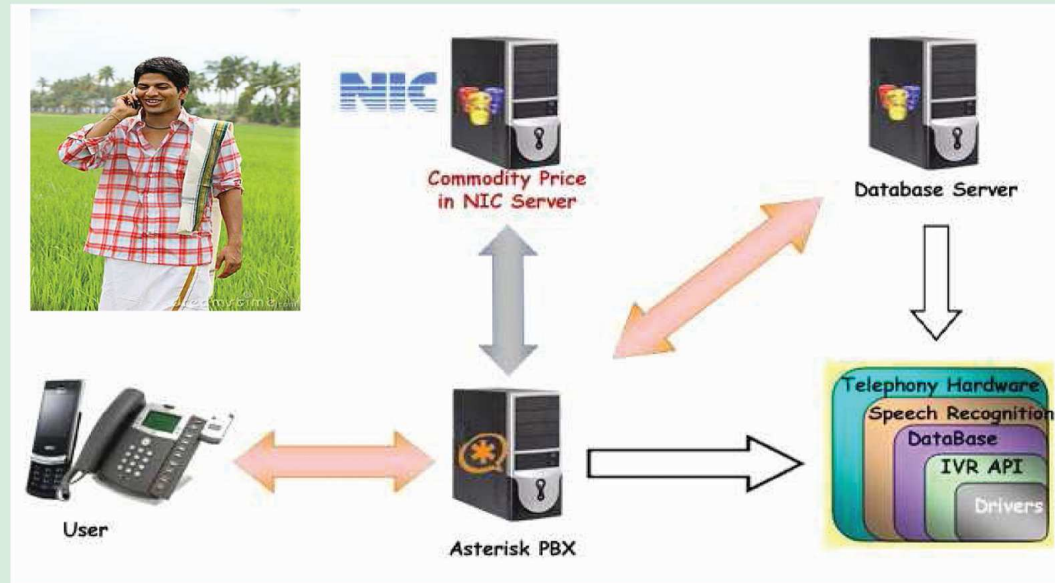


Objective:

To implement and deploy a speech access based system for users to get prices of agricultural commodities over telephone/mobile. Such systems would provide excellent value-addition to the already existing website <http://www.agmarknet.nic.in/> managed by the Ministry of Agriculture, since no computer, reading or writing skills are required for the proposed system. The languages covered are Bangla, Assamese, Marathi, Tamil, and Telugu. C-DAC Kolkata is responsible for the system development in Bangla Language.

System Features:

- Remote access via mobile or landline phone, no need of computers and Internet.
- Easy to use: support Voice query and response, no need to type or touch.
- 24 x 7 hrs Automated Service, no more waiting for reply from manual operators.
- Mother tongue support, Bi-lingual (Bangla & English) prompts for better usability.
- Helpful for illiterate and visually impaired farmers.
- Toll free service via Kisan Call Centre.



General block diagram of the system.

Technology:

- Computer Telephony Interface (CTI): Parallel handling of inbound/outbound calls over 30 voice channels.
- Speech Recognition: Hidden Markov Model based speech recognition engine.

System Requirements:

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| <ul style="list-style-type: none">• Hardware<ul style="list-style-type: none">• ISDN-PRI / E1 Channel• PRI Modem (ASMi-52)• Asterisk Server• Sangoma A101 CTI Card | <ul style="list-style-type: none">• Software<ul style="list-style-type: none">• Linux Operating System• Asterisk Gateway Interface (AGI)• High-Level Scripting• External resources: MySQL, http, |
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Likely End Users:

- Farmers and other users interested in obtaining the latest prices of agricultural commodities by just speaking over the telephone.
- This system will be especially useful for those who have no access to computers and Internet, and who may not have the required computer skills and reading/writing skills.
- Successful completion of this project would also enable development of similar speech-based systems for many other applications like Voice enabled Railway travel enquiry system, Health informatics, Tourist guide, Weather forecasting etc.

Try Demonstration: Dial (033)-2357-9009

(Press 1 for Bangla prompt or 2 for English prompt. Then press 02 for getting commodity price)



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