



Structuring Voice of Customer Data to Unlock Business Intelligence

March 2008



Speech Analytics for the Contact Center



- Why does Speech Analytics matter?
- Turning Audio into Data
- Technology Approaches
- Elements of a Sustainable Solution
- How it works
- The Process
- Business Value to the Enterprise

Contact Center Analytics ... What's Missing?

Do you know why your customers are calling (*caller intent*)?

What are your agents and customers doing (*key behaviors*)?

And how does this impact your relationships with your customers (*customer sentiment*)?



Analysis of Speech to:

Reduce Cost of Doing Business

Increase Revenue

Improve Customer Satisfaction

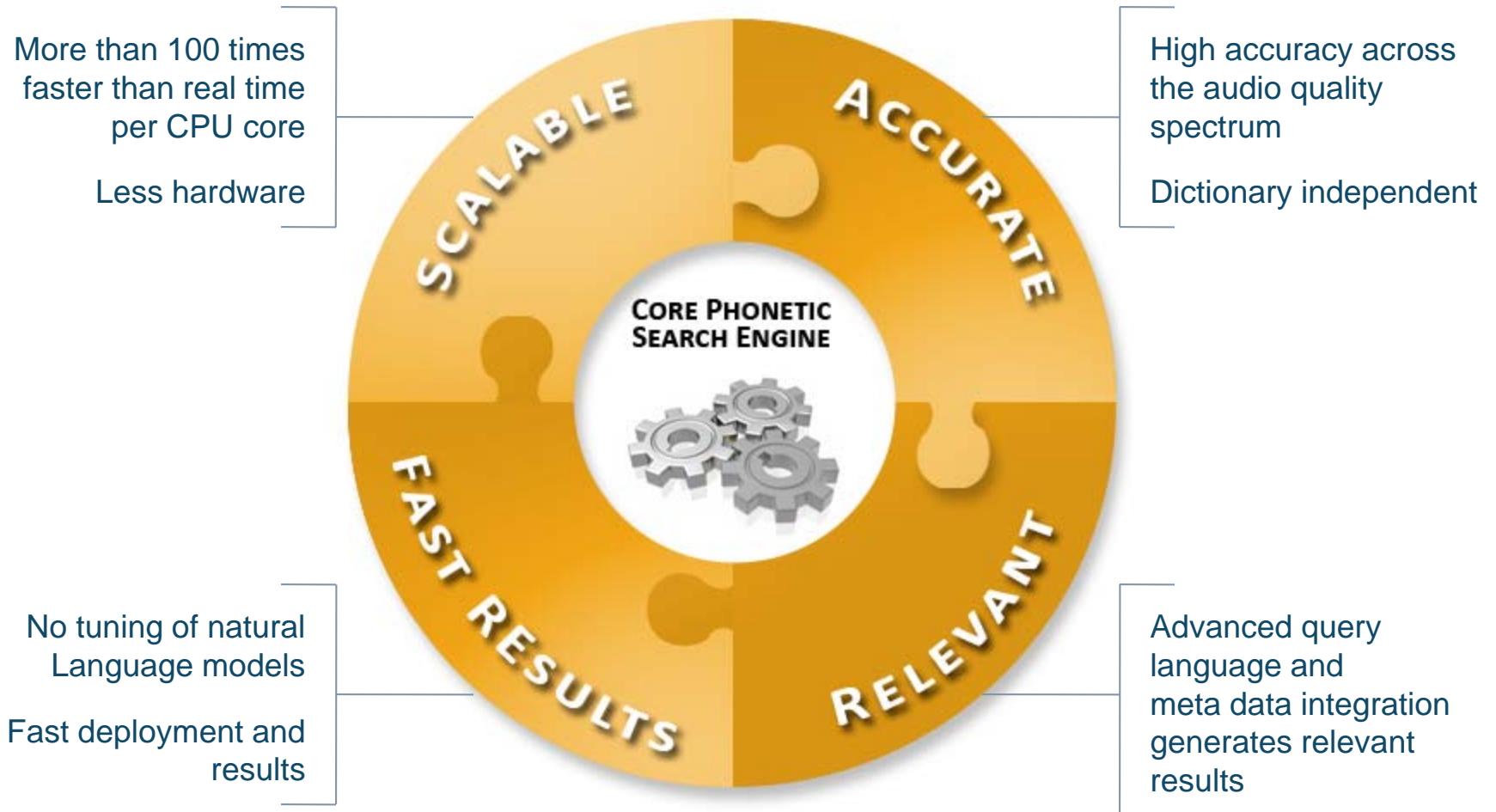
Turning Recorded Audio into Data - Considerations

- Fundamentally, all approaches are trying to do the same thing...
 - Distinguish speech sound in recorded sound waves
 - Save the results for use in various application
- Several different approaches are employed to find words
 - Acoustic Keyword Spotting
 - LVCSR (Speech to Text)
 - Word Lattices
 - Phonetic Approaches
- But, words aren't the only data in recorded audio
 - Silence, music, DTMF
 - Gender, accent, fluency
 - Tone/inflection
 - Language Identification

Turning Recorded Speech into Data - Approaches

- Acoustic Keyword Spotting
- LVCSR (Large Vocabulary Continuous Speech Recognition)
- Phonetic Indexing

Elements of a Sustainable Solution



How it Works

Extract calls and meta data



Index and search audio



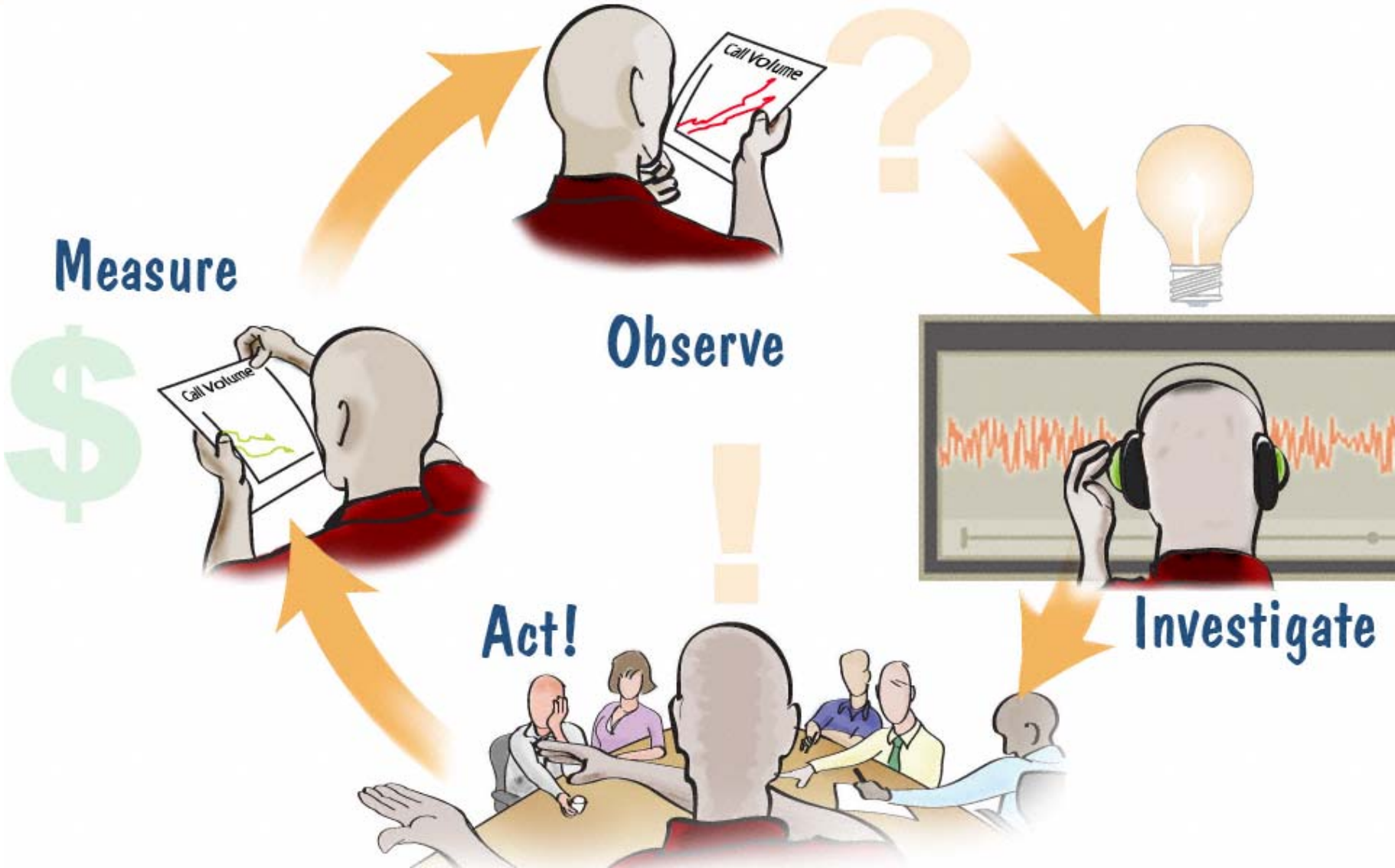
Open Data Warehouse



Reporting and Investigative Tools



Sustainable Process Improvement



Business Value to the Enterprise

CALL DRIVER ANALYSIS

Business Cases

- *Call Avoidance*
- *Call Deflection*
- *Appropriate Routing*
- *Self Service Opportunities*
- *First Call Resolution*
- *Appropriate Transfers*
- *Reducing Transfers*
- *Reducing Repeat Calls*
- *Increase Sales Effectiveness*
- *Improve Customer Retention*
- *Risk Management*
- *Compliance*



Demonstration