IVR in Virtual ACD Solutions

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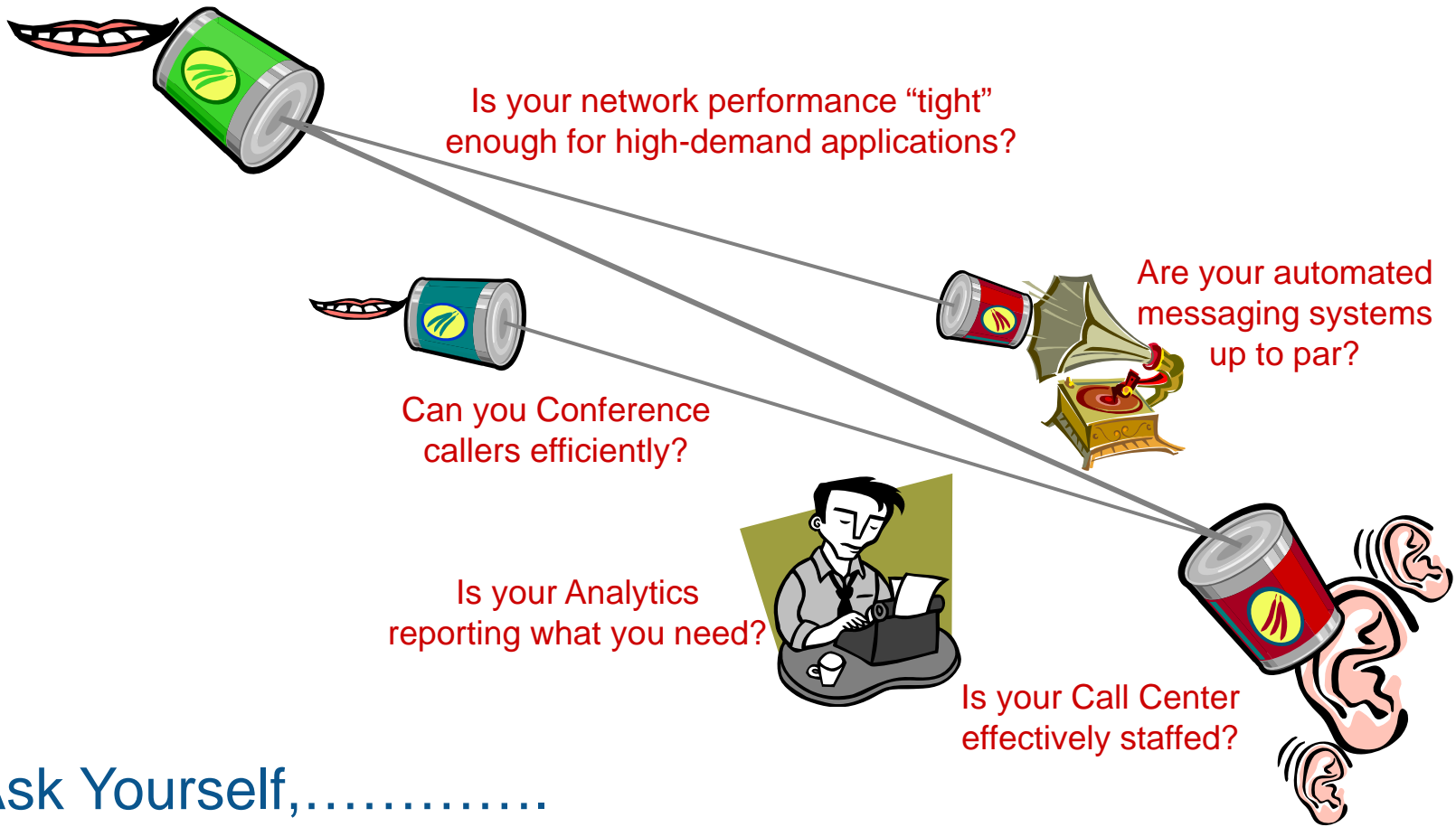
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Background

- "C203: Infrastructure for contact centers adapting to Voice Search"

- What is Voice Search???

- Some Observations / Questions

  - Is it the next generation of speech recognition?

  - Is IVR technology now an unavoidable part of Contact Center operations?

  - Is this the "Convergence" of speech recognition and analytics?

  - Through all of our adoption of "other" forms of communication in the last 2-3 decades; voice and contact centers remain critical to customer contact management.

- Assuming "yes" or "true" to all of the above……., How do we get ready?

Evaluating The "Situation"

Some Basic Objectives Never Change…………..

Is your network performance "tight" enough for high-demand applications?

Are your automated messaging systems up to par?

Can you Conference callers efficiently?

Is your Analytics reporting what you need?
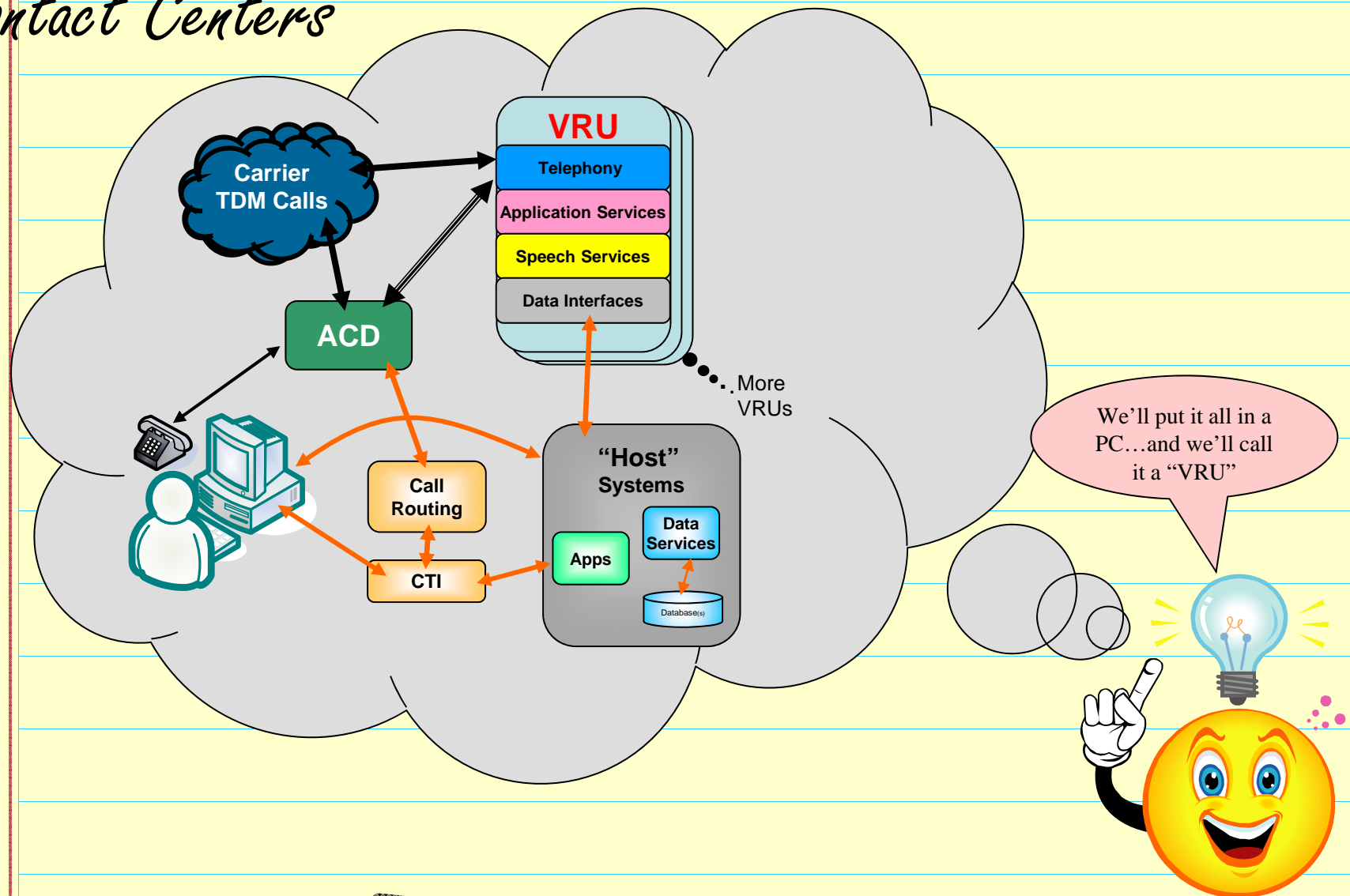
Is your Call Center effectively staffed?

Ask Yourself,…………
"How's my current Contact Center working???"
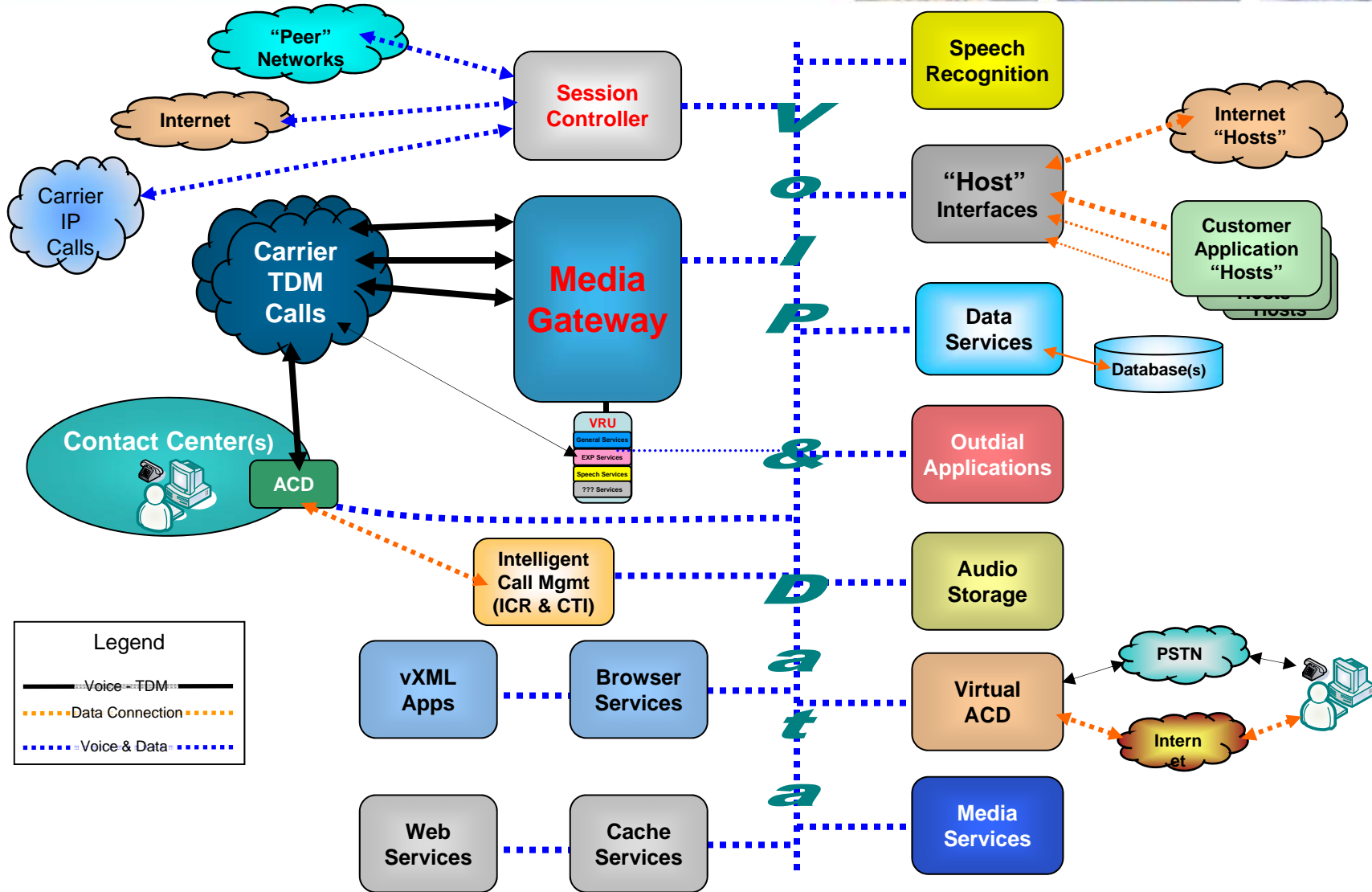
Contact Center Infrastructure

- Historically "Self-Contained"
  - Direct Carrier Connectivity
  - On-Premise ACD Telephony
  - Connectivity to Host Applications
  - Local Call Routing and CTI interfaces
  - Local "Support" Systems (Recording, Reporting, Training, etc.)

- IVR "front-ends"   - Internal or External
  - A wide range of process/cost Alternatives

- The "Mission" remains largely unchanged
  - Great Service for Callers and Supported Businesses

- "Voice Search" Opportunities:
  - Continued Evolution of IVR Front-End Automation, Limiting or Improving the Agent Portion of a Call
  - Application of Speech Analytics to Improve Caller Experience

"OLD" Approach to adding Voice Response Unit(s) to Contact Centers

"New" Generation Architecture

Legend

Voice - TDM	
Data Connection	
Voice & Data	

Peer" Networks

Internet

Carrier IP Calls

Session Controller

Carrier TDM Calls

Media Gateway

Contact Center(s)

ACD

VRU
General Services
EXP Services
Speech Services
??? Services

Intelligent Call Mgmt (ICR & CTI)

vXML Apps

Browser Services

Web Services

Cache Services

V o I P & D a t a

Speech Recognition

"Host" Interfaces

Internet "Hosts"

Customer Application "Hosts"

Hosts

Data Services

Database(s)

Outdial Applications

Audio Storage

Virtual ACD

PSTN

Internet

Media Services

"Virtual" ACD Processing Model

- **Agent Data Interfaces Similar**
  - ➤ Log in to establish agent "presence"
  - ➤ Agent Profile(s), "Skills", Workforce Management, Supervisor Interfaces
    - ▪ Multiple Distributed Services
  - ➤ Desktop is still the "Same" (application(s), "softphone" controls, etc.)
  - ➤ High Speed Internet Connectivity required

- **Telephony Connectivity Multifaceted**
  - ➤ Basic Requirement is for KNOWN Route to agent
  - ➤ PSTN numbers (DID) can work fine
  - ➤ Softphone Registration more complex but is evolving positively.
  - ➤ Quality Challenges with Softphones

IVR Design Practices

- **Understanding the User Interface Focus**
  - ➢ Automation Outcome
  - ➢ Agent Interface Outcome

- **"Dialog" Design**
  - ➢ "Specialty" Skill Set that's Critical to "Do The Right Thing"
  - ➢ *Think Like The Caller*

- **Establish Caller Relationship with IVR Interface**
  - ➢ Voice Selection, Context Sensitive, Data-based Customization

- **Successful IVR Design Produces Dramatic Differences in the Application of Advanced Speech Technology**
  - ➢ "Natural Language"
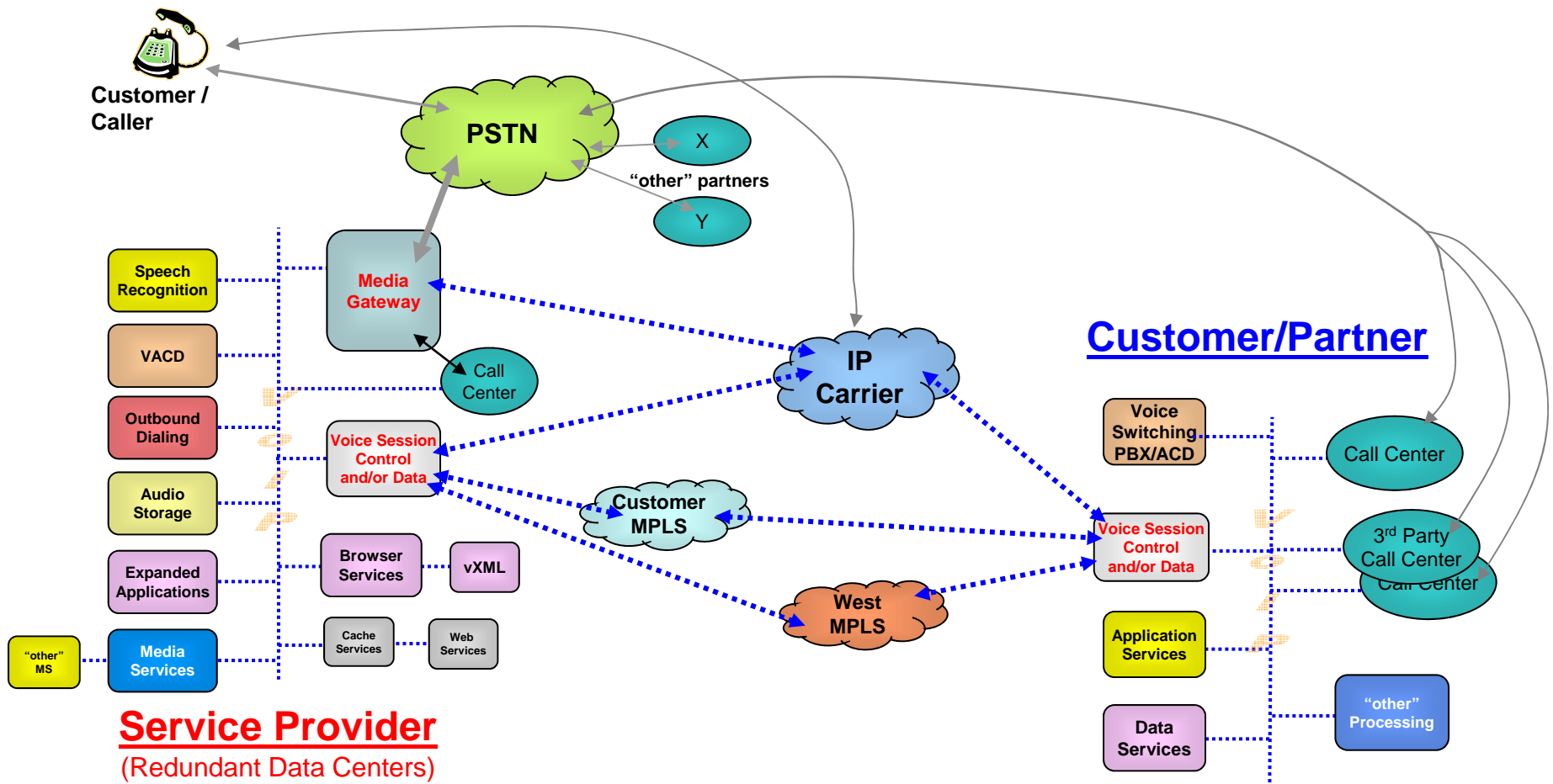 - ➢ "Real-time" Analytics

Key Research/Decision Areas

- **If You are Running Contact Centers, You Need to Examine the Following:**
  - Telephony Connectivity
    - ➤ Carrier Connectivity
    - ➤ Private Networking
    - ➤ IP Replacing Circuit-switched (***This is a BIG one)
      - *"The Most Under-Appreciated Technical Capability in the U.S. is The North American Dial Plan"*
  - Support Systems (IVR, Analytics, Billing, Workforce Management)
    - ➤ Self Manage
    - ➤ Outsource
  - Business Intelligence
    - ➤ "Do I Really Know What My Clients Need???"
    - ➤ Establish Internal Growth Strategies

Customer / Caller

PSTN

X

"other" partners

Y

Speech Recognition

VACD

Outbound Dialing

Audio Storage

Expanded Applications

"other" MS

Media Services

Media Gateway

Call Center

Voice Session Control and/or Data

Browser Services

vXML

Cache Services

Web Services

IP Carrier

Customer MPLS

West MPLS

Customer/Partner

Voice Switching PBX/ACD

Voice Session Control and/or Data

Application Services

Data Services

Call Center

3rd Party Call Center

Call Center

"other" Processing

Service Provider

(Redundant Data Centers)

Summary

- **Research Indicates Contact Centers Aren't Going Away**
  - Get Ready….!!!
  - Continued Investment is Network Performance & Distributed Processing

- **"Brick & Mortar" Centers Are Not "Necessary"**
  - Multiple Work At Home Solutions are Available
  - Voice Search Can Strengthen Agent Interface in All Cases

- **Good Automated Experiences Tend to Produce Good Agent Experiences**
  - Invest in Producing High-Quality IVR Interfaces

- **Analytics is Changing the Landscape of Quality in Contact Center Management**

- **What is Voice Search?**
  - I don't know for sure yet, but I know it's gonna' be really cool!!!