

Contact Center of the Future Laboratory and Demonstration

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CEM IR&D and MSR

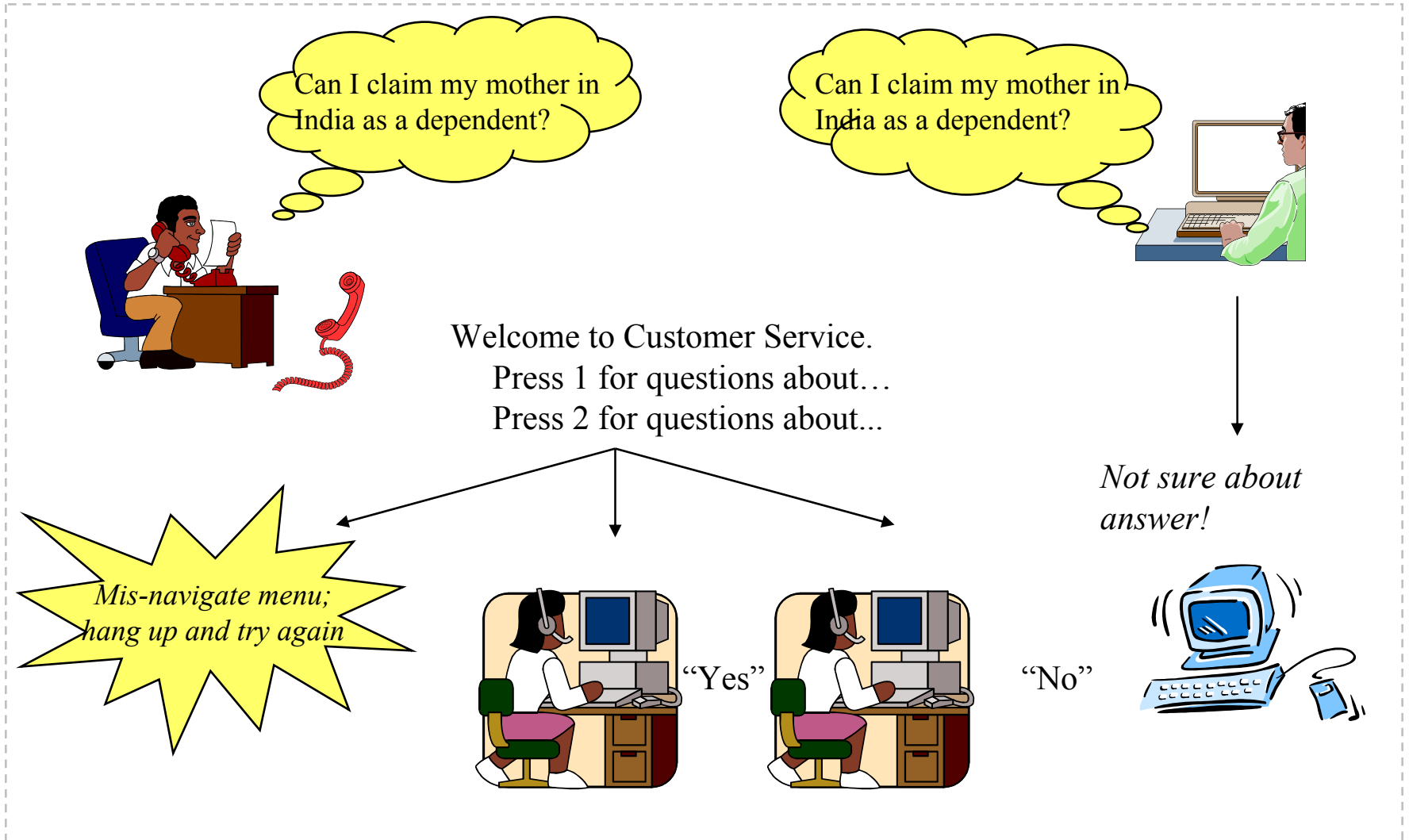


Problem

- **IRS Customer Service objectives necessitate:**
 - **providing service on a number of communication channels, e.g., telephony, WWW, e-mail, facsimile, etc.,**
 - **keeping up to date with the technologies and standards affecting those channels, and**
 - **maintaining service effectiveness while optimizing operations.**

A contact center of the future (CCOF) laboratory is needed to evaluate new customer service concepts and emerging technologies.

Background



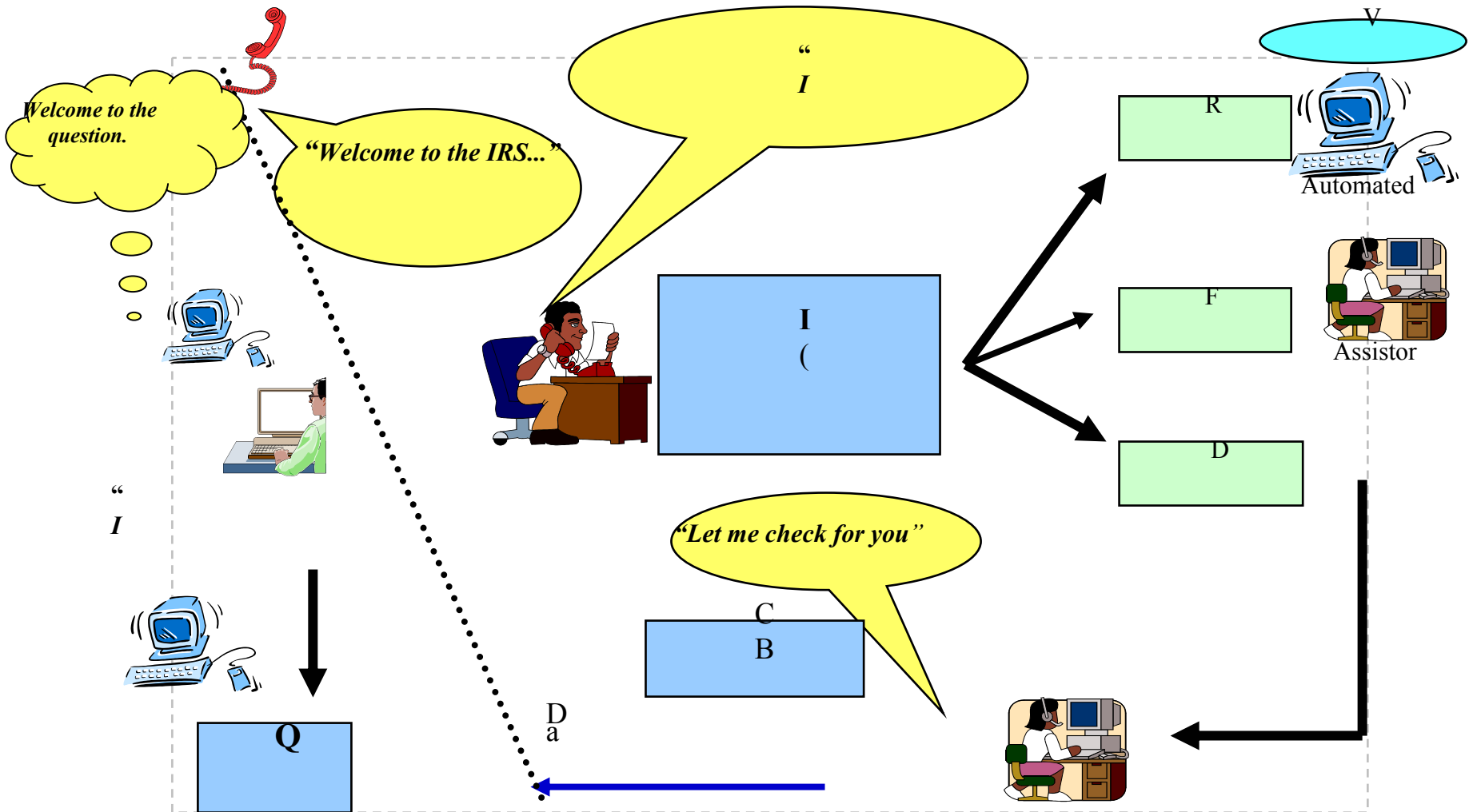
Objective

- **Develop and demonstrate new technologies to provide effective customer service on multiple channels, including:**
 - **caller intent-identification capability using COTS speech technologies and standards (speech recognition and Voice XML),**
 - **intelligent contact management and routing using emerging technologies, and**
 - **utility of MITRE-sponsored Web-browsing technologies in the CCOF environment.**

Activities

- **Designed and implemented a CCOF laboratory infrastructure incorporating:**
 - **conversion of conventional (analog & TDM) voice signals to H.323 network**
 - **COTS speech-technology products**
- **Implemented intent identification and automated voice services using voice XML**
- **Integrated MITRE-developed QANDA and Conceptual Browsing tools into CCOF laboratory**

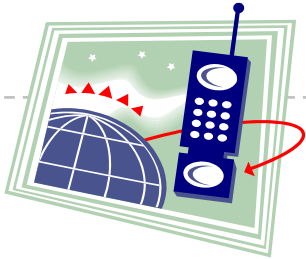
Demonstration



Impacts

- **Customer operational mission: future direction of IRS call centers**
- **Developing work program: application to other MITRE customers**
- **Vendor community:**
 - **contact-center product development**
 - **implementation of H.323 standard**
- **Relevant knowledge capture/dissemination: conference papers/proceedings**

Future Plans



New Communication Modes, e.g.:

- Web-chat
- WAP/PDA/Blueberry
- Internet voice-chat

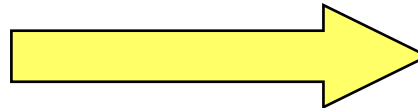


Emerging Technologies, e.g.:

- Open-ended query systems, e.g., 'How May I Help You?'
- Keyword spotting



**Contact Center
of the Future**



**Investigate
New
Automated
Applications**

