Legacy System Analysis and Requirements Gathering

Objective: Assess current VXML-based systems and define technical and functional integration requirements.

1. Review the architecture and capabilities of existing IVR implementations

- Analyze current VoiceXML-based IVR workflows and call flows.
- Review existing call handling logic, prompts, menus, and routing behavior.
- Understand speech recognition, DTMF handling, and business rule processing in legacy system.
- Identify existing telephony infrastructure, platforms, and integration components.

2. Document integration needs for alignment with ACS and BAP platforms

- Define API and data exchange requirements between legacy IVR and Azure Communication Services (ACS).
- Map VXML intents and call flows to Conversational AI workflows.
- Determine requirements for migrating prompts, menus, and business logic.
- Identify integration checkpoints for Business Application Platform (BAP) workflows.

3. Identify technical challenges, constraints, and compatibility gaps

- Legacy VXML scripting vs modern conversational flow orchestration.
- Differences in speech engines, grammar models, and NLP capabilities.
- Telephony compatibility issues (SIP trunks, PSTN bridges, codecs).
- Infrastructure challenges, latency concerns, and IVR performance requirements.
- Potential security, authentication, and PII handling gaps.
- Fallback strategy planning for hybrid (legacy + new) coexistence phase.

Conclusion: This phase establishes a foundation by assessing the current VXML system and defining technical and integration requirements to ensure seamless migration to a conversational IVR architecture with ACS and BAP compatibility.