**Interactive Voice Response (IVR) Functionalities**

**1. DTMF Handling**

**Definition & Purpose**

Dual-Tone Multi-Frequency (DTMF) is the signaling method used when a caller presses keys on a telephone keypad. Each key generates a unique combination of two tones — one from a low-frequency group and one from a high-frequency group — allowing the IVR system to detect and interpret the input.

**Key Functions**

* **Menu Navigation:** Callers can select options (e.g., “Press 1 for Sales, Press 2 for Support”) without speaking.
* **Data Entry:** Enables secure input of account numbers, PINs, or other numeric data.
* **Transaction Processing:** Facilitates automated bill payments, balance checks, and service activations.
* **Error Handling:** Detects invalid entries and prompts the caller to retry.

**Benefits**

* High accuracy in input detection.
* Works in noisy environments where voice recognition may fail.
* Secure for sensitive data entry.

**2. Voice Prompts**

**Definition & Purpose**

Voice prompts are pre-recorded or dynamically generated audio messages that guide callers through the IVR menu and provide information or instructions.

**Types of Voice Prompts**

* **Greeting Prompts:** Welcome the caller and set the tone for the interaction.
* **Menu Prompts:** Present available options clearly and concisely.
* **Informational Prompts:** Provide updates such as account balances, order status, or business hours.
* **Error Prompts:** Notify callers of invalid input and offer corrective guidance.
* **On-Hold Prompts:** Play music or messages while the caller waits for the next step or an agent.

**Best Practices**

* Keep prompts short and clear.
* Use a friendly, professional tone.
* Ensure consistent volume and audio quality.
* Offer both voice and keypad input options for accessibility.

**3. Call Routing**

**Definition & Purpose**

Call routing is the process of directing incoming calls to the most appropriate destination based on caller input, system logic, or predefined rules.

**Routing Methods**

* **DTMF-Based Routing:** Uses keypad input to determine the destination.
* **Skill-Based Routing:** Directs calls to agents with specific expertise.
* **Time-Based Routing:** Routes calls differently depending on business hours or holidays.
* **Geographic Routing:** Directs calls based on the caller’s location.
* **Priority Routing:** Gives preference to VIP customers or urgent cases.

**Benefits**

* Reduces wait times by connecting callers to the right resource quickly.
* Improves customer satisfaction through efficient handling.
* Optimizes agent workload and resource allocation.

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| Functionality | Description | Example Use Case |
| DTMF Handling | |  |  | | --- | --- | |  | Detects keypad tones for menu navigation and data entry | | Entering account number to check balance |
| Voice Prompts | Audio guidance for callers | |  |  | | --- | --- | |  | “Press 1 for Sales, Press 2 for Support” | |
| Call Routing | Directs calls to the right destination | |  |  | | --- | --- | |  | Routing VIP customers to priority support | |