

Role Plays

Use Role Plays within your team to quickly verify the UX or conversation flows and uncover edge cases, gaps in the flow, and/or needs for conversation repair.

UX Flow Mapping

Define the full UX Flow which may consist of onboarding, the “happy path” (how the voice capability works when everything goes according to plan), conversation repair, handling unexpected intents, edge cases, etc.

Sample Dialogue Writing

Write sample dialogues between the user and the voice assistant which illustrate the main use cases of the voice product. Typically used as “sketching” or a low-fidelity prototyping approach in the course of voice product development.

Certification

Voice apps are released through platforms on which a certification is required. Fixes, debugging, and configuration should be continued until approval.

Platform Exploration

Analysing the technical limitations, audience, and market share in the target region to identify the priority platform(s) for the desired product.

Voice Design Sprint

Perform a time-constrained, five-phase process based on Design Thinking with the aim of reducing the risk when bringing your product to the market. The Voice Design Sprint uses specific tools for “sketching” and testing phases like Sample Dialogues, UX Flow Maps, and simulation web tools.

Anchor Personality Development

Develop a brand persona using the brand guide or core brand assets which were defined in the immersion phase. The anchor personality may be structured based on several aspects like tone of voice, core values, key personality traits, etc. This includes picking or developing a synthetic voice to represent the brand.

Language Styling and SSML

Customize the pauses and intonation in the voice assistant's responses with the help of SSML, a markup language that provides a standard way to mark up text for the generation of synthetic speech.

Configuration

Input the information needed to bring the voice app to the app store: the capability name, invocation, description, tags, and visual assets.

Training NLU

Provide examples to the intent engine of how the same utterance can be asked in different ways by the user. Developers add these variations in order to help train the NLU model. The more variations added to the intent, the better the agent will understand the user.

Intent Identification and Prioritization

Break up the product concept into user intents (what the user might want to do within your voice capability). Prioritize intents by referring to your product value proposition canvas then use a value calculation based on importance and engineering effort required (or another technique).

Utterance Capture

Run qualitative user research activities targeted at eliciting the utterance variations and different ways users can phrase the same intent.

Interface Evaluation Scorecard

Use a set of criteria to help understand whether voice is the right fit (e.g., voice will do X particular user job better than other interfaces like web and mobile), and whether the experience should be voice-only or multi-modal.

VUI Accessibility Design

Execute user research and adapt the voice design to fit the different user needs: language ability, seniors, visually impaired, multi-modal interaction, cognitive needs. This may typically include using SSML to have the assistant speak faster/slower, having alternative descriptive flows for visually impaired people, etc.

Happy Path Definition

Define the most basic conversation flow which allows the user to accomplish the task in the easiest way.

Conversation Flow Design

Using the UX Flow Mapping work on the utterance level of the VUI (i.e., actual wording for each step of the UX Flow Map and the different possible variations for it).

Conversation Repair

Outline the Conversation Repair scenarios where users do something unexpected, such as asking to do something you don't support or not being able to understand them.

Design Scaling

Determining how the VUI design adapts to the user over time. This can include alternative onboarding dialog for more experienced users, strategy and method for the introduction of new features, and variable responses to create more natural conversational interactions.

Monetization Model Exploration

Explore existing monetization models on target platforms in order to find the best a fit for your voice product.

Template Exploration

Explore existing templates and blueprints provided by the VPA platforms and third-party vendors. For popular use cases and domains where voice works well, you might not need to research and design the whole experience from scratch.

Sound Design

Develop any sound recordings needed for the experience of your app. This may include producing the sonic logo, earcons, recording actors' voices, music, and more.

Content Production

Work on developing necessary content for the voice capability: voice recording, video shooting, script writing, game development, etc.

Audio Branding

Based on your brand guide and positioning, develop brand assets for voice design which help your brand maintain its character in voice-only experiences. This includes: a sonic logo, earcons, anchor personality, etc.

Invocation Naming

Select a memorable and easy-to-pronounce invocation name in compliance with platform requirements for invocation naming.

Technique

VUI/CUI Benchmarking

Research and compare the voice user experience and design of existing or similar voice products.

Product System Development

Develop a system of voice apps to improve discoverability through cross-referencing as well as offer a more simple user experience.

Technique

Visual Design

Design visual assets for voice-first devices with screens. This includes in the home and on the go, e.g., car HMI or mobile.

Discoverability Strategy

Leverage existing channels like web, mobile, or even ATL channels like radio and TV to raise awareness of your voice app.

User Engagement Strategy

Plan and design the use of notifications, routine suggestions, and daily updates in order to help user engagement.

QA Testing for Voice

Test for the following scenarios: variable onboarding, conversation repair, accessibility, volume levelling. Test various combinations of your required slots. Test various user utterances used for the same intent.

VUI/CUI Testing

Test the VUI/CUI to be intuitive and personalized to new and returning users and display a consistent personality.

Delivery Tools Exploration

Conduct an overview of delivery tools to help build voice experiences without coding, deliver cross-platform experiences, and make a decision, based on complexity, whether development is needed should you go cross-platform or build natively for each platform.

Conversation Trend Analysis

Conduct research to learn what topics people are actively talking about then use this as an input to ideation.

Fulfillment Web Service Architecture

Create a web service if your voice app leverages dynamic content or is cross-platform.

Technique

Account Linking Setup

Set up OAuth for account linking.

Fulfillment Web Service Hosting Research

Select your fulfillment web service hosting:
cloud-based or on-premise.

Intent Slot Collection Strategy

Decide if you will fully design all the conversation flow variants or delegate to the VPA for slot collection.

Custom Analytics Implementation

Implement analytics on top of what's provided by the platform to have access to utterance-level data.

Model Updates Strategy

Set up failed utterance data collection to update the language model.

NLP Strategy

Choose between implementing a custom NLP/NLU to handle the user requests on all platforms or rely on each platform's embedded solution.

Deployment Strategy and Automation

Implement integration and continuous deployment which includes automatically updating the language model and certification submission.

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