Conversation Services

TiVo's conversation services let consumers use their voices to search for digital entertainment across data spaces by speaking free-flowing, conversational dialogue. The system can follow natural conversations, deduce differences in meaning, understand complex queries and support context-switching, pronoun use, follow-up questions, negation and ambiguous language.

An end-to-end solution powered by Natural Language Understanding (NLU) and Natural Language Processing (NLP), TiVo's conversation services work by semantically processing naturally spoken language and sequential dialogue to recognize entities, intents and query context, similar to what occurs in normal human-to-human conversations.

Built on the industry's most robust entertainment knowledge graph engine, responses take content, user behavior, context and situation into account to display relevant, personalized results. With the conversation training tool, TiVo's conversation services allow providers to train the NLU engine by adding custom entity and intent values to the system and connecting new data sources to enable unique, integrated functionality for subscribers.

FEATURES

Natural Language Interactions
Advanced NLU and NLP convert natural language into queries to support free-flowing conversations.

Entity Recognition
Identifies unique entities and disambiguates between similar content based on context.

User Intent Recognition
Discerns user intent based on context.

Context Recognition
Supports intelligent, context-aware conversations, even when topics are switched or pronouns are used in follow-up questions or commands.

Customization
Entity and intent can be customized for customer-specific commands. (e.g., "record to DVR," "add to queue," etc.)

Smart Response
Enables natural dialogue with over 10,000 creatively constructed Smart Responses.

Voice Gateway
Provides a flexible mediation layer that can easily connect with most ASR vendors or search engines to enable a single, quick and efficient integration point.

BENEFITS

Enable New Use Cases

Add custom entity and intent values to the system and connect new data sources to enable unique, integrated functionality for subscribers.

Utilize TiVo's Knowledge Graph Engine

Power search and recommendations with an industry-leading entertainment knowledge graph.

Support Ongoing Business Requirements

Maintain performance during peak usage via flexible, scalable cloud architecture.

TIVO'S KNOWLEDGE GRAPH ENGINE

TiVo's conversation services are built on our unparalleled knowledge graph engine, a dynamic knowledge base of entertainment metadata capable of understanding trends and conversations. TiVo's knowledge graph engine semantically generates this structured set of meaningful connections with an awareness of regional trends and popularity from 100,000 online sources. This enables content distributors to deliver more accurate search results and recommendations, and provides content producers greater insight into how their content is faring in the marketplace.