



# Infobip X iRewards

Best Practices for a Chatbot Design

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# Selecting the Optimal Chatbot Type



# Chatbot Type

To ensure we select the appropriate chatbot types, we should clearly identify each type and understand their respective advantages and disadvantages.



Keyword  
driven

Route customers through dialogs based on inputs and callback value mapping



Intent driven

Driven by the Infobip AI engine and work on a combination of keywords and machine learning to achieve smart, and almost self-service, chatbots



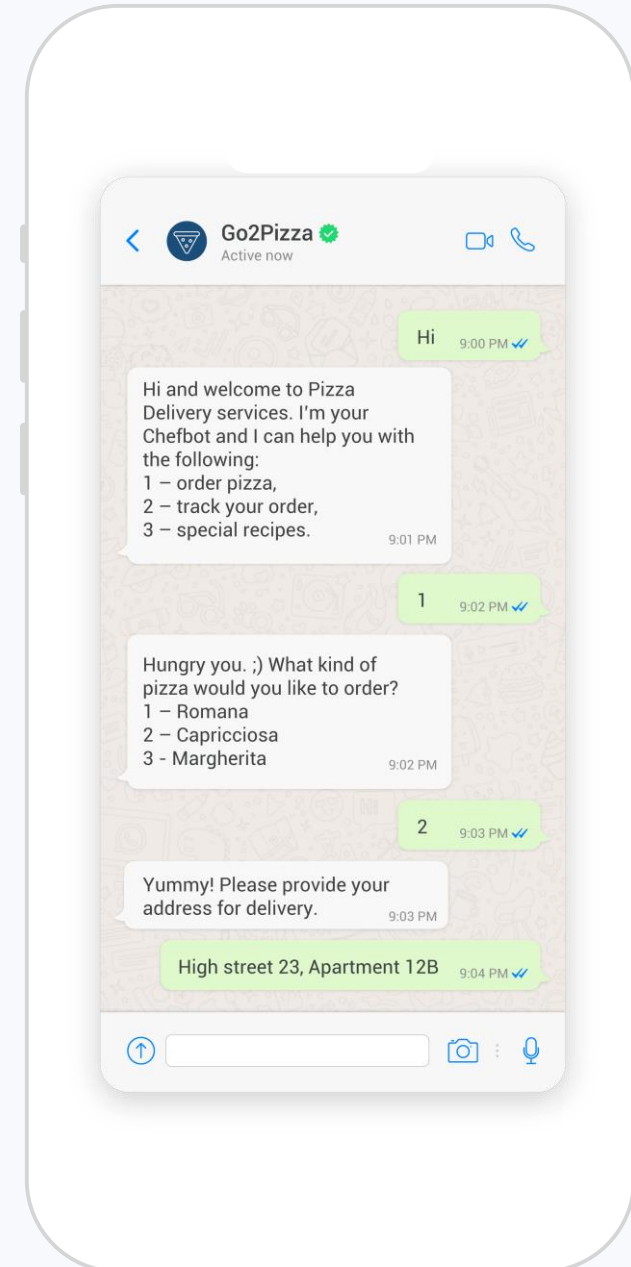
RAG

AI assistant, powered by GPT can answer questions based on knowledge base and can be utilized via prompt engineering



# Keyword-Driven Chatbot

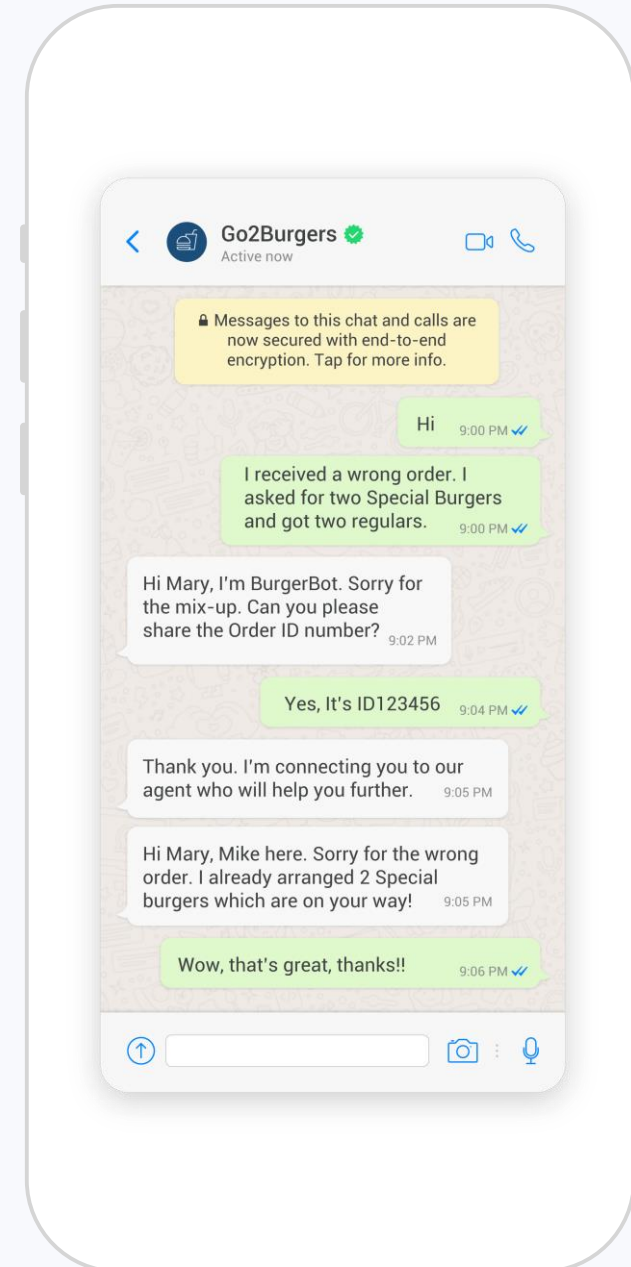
- Advantage
  - Keyword-driven chatbots can quickly identify customer needs and provide immediate responses, leading to faster resolution times.
  - By using predefined dialogs, keyword-driven chatbots ensure that all customers receive consistent and accurate information.
- Disadvantage
  - The chatbot's effectiveness is limited to the keywords it has been programmed to recognize.
  - It may struggle with complex or multi-faceted queries that require deeper understanding or context.





# Intent-Driven Chatbot

- Advantage
  - These chatbots can handle complex and multi-faceted queries more effectively than keyword-driven bots
  - By accurately understanding user intent, these chatbots can quickly route users to the appropriate solutions, reducing resolution times
- Disadvantage
  - It may require datasets for pretraining, the more the datasets covers, the better the outcome would be which makes the initial setup complex and time-consuming.
  - It still requires predefined response config in the bot.

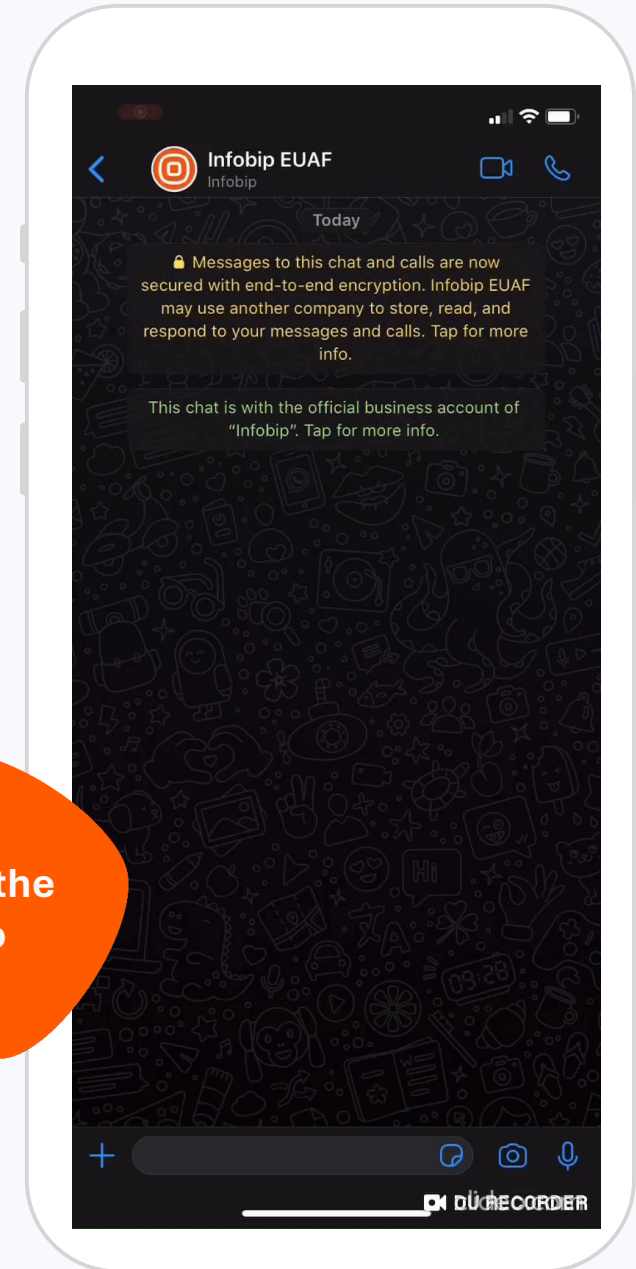




# Chatbot + AI assistant

- Advantage
  - By leveraging external knowledge sources, these chatbots minimize the risk of generating incorrect or irrelevant information.
  - Enable human-like communication
- Disadvantage
  - Regular updates and re-indexing of the knowledge base are necessary to maintain accuracy, which can be labor-intensive
  - Developing and implementing RAG chatbots can be more expensive compared to simpler models

Play the  
video





# Essential Tips for High-Level Design



## Sample Scoping

- Channel : WhatsApp
- Language: English + Bahasa
- Bot Type: Keyword-Driven
- Scenarios
  - 1- Profile /Registration
    - Chatbot would ask for Province and City. With the 2 collected, the bot would update the Region and CPS coordinates
    - This is done via Static WA flow and API custom development is not required.
  - 2- Product Recommendation
    - The product would be recommended based on Month and membership level.
    - Chatbot would send product image to end user provided by Custome.
  - 3- Talk to an expert
    - The chat would be transferred to agent in Conversations

# Key Takeaway

Questions to answer before solution proposal:

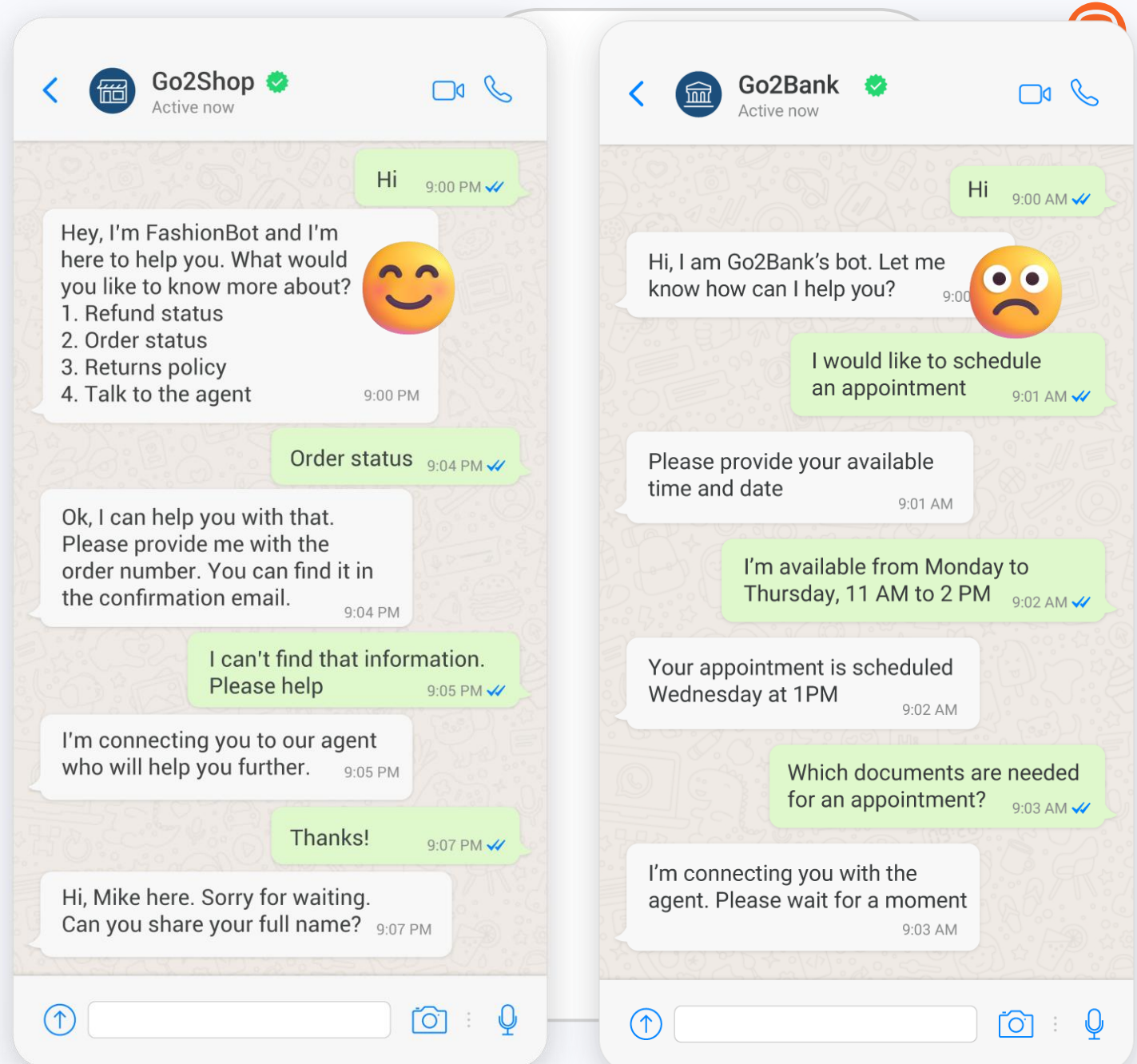
- How many communication channels are needed?
- How many languages should the chatbot support?
- What types of chatbots does the customer want to use?
- How many different scenarios should the chatbot handle?
- Is it required to integrate the chatbot with other systems using APIs?



# Key Considerations for Low-Level Design

# Beware the bot's first message

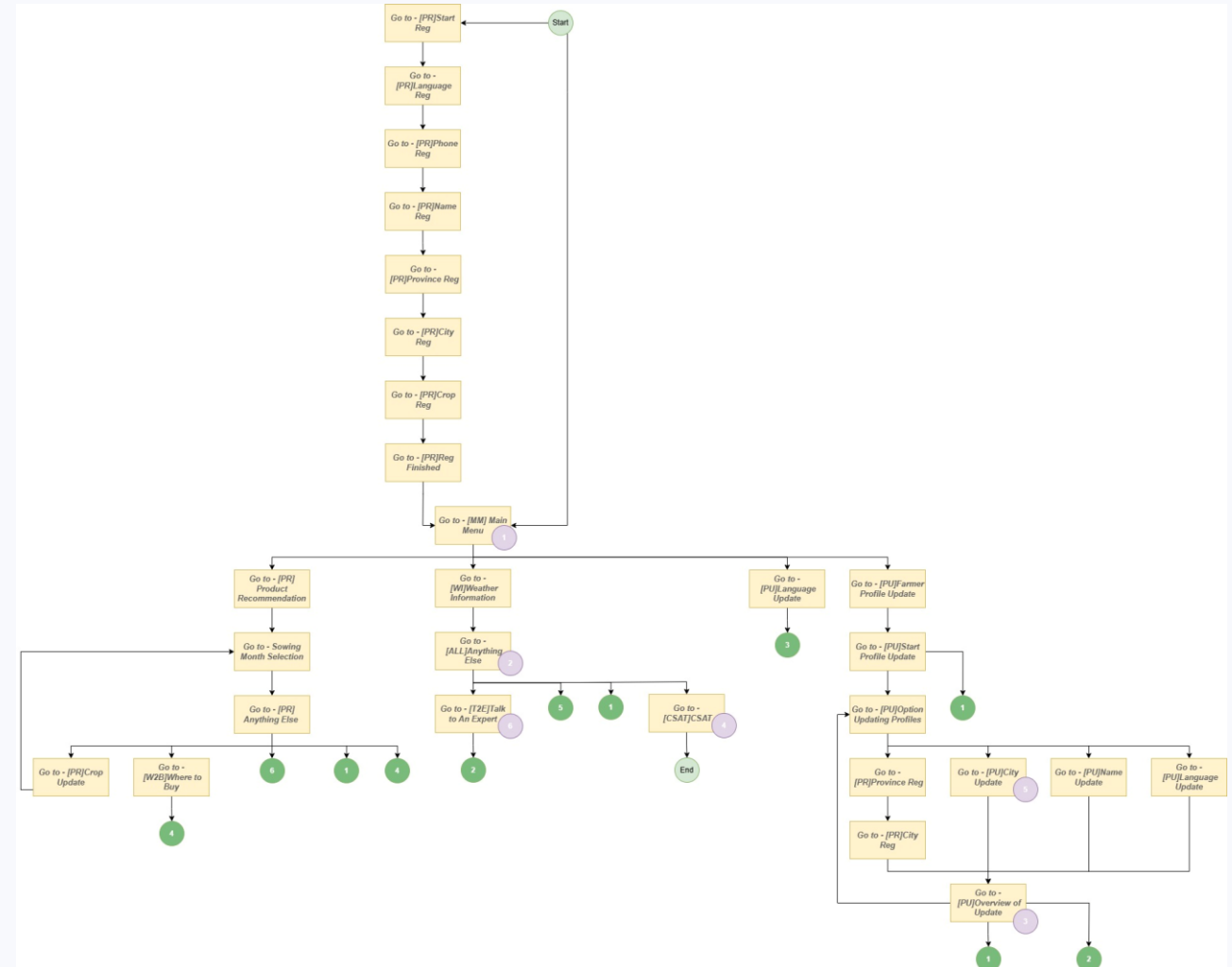
- **Sets the Tone:** A warm and welcoming first message helps create a positive impression and sets the stage for a friendly interaction.
- **Clarifies Capabilities:** By clearly stating what I can help with, I ensure you know exactly how I can assist, reducing any potential frustration.
- **Guides the Conversation:** A well-crafted initial message can guide the conversation in the right direction, making it easier for you to get the help you need.
- **Encourages Engagement:** An engaging first message encourages you to interact more, making the experience enjoyable and productive.





# Consider dialogue structure

- Offer a clear visual map of interactions.
- Ensure all components work harmoniously.
- Avoid unnecessary configurations.
- Simplify troubleshooting and updates.



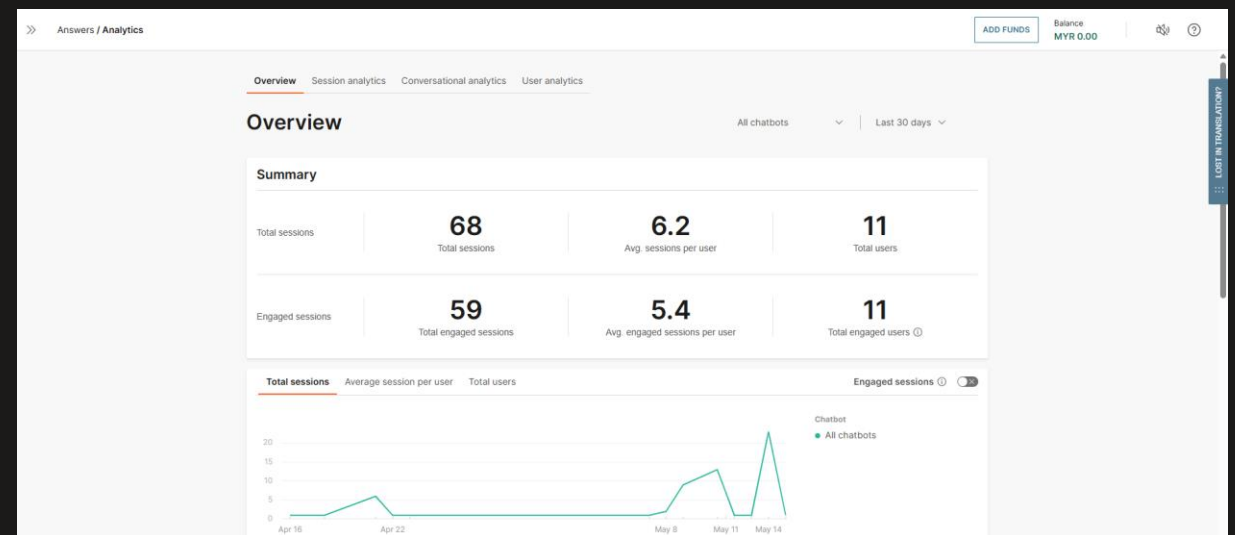
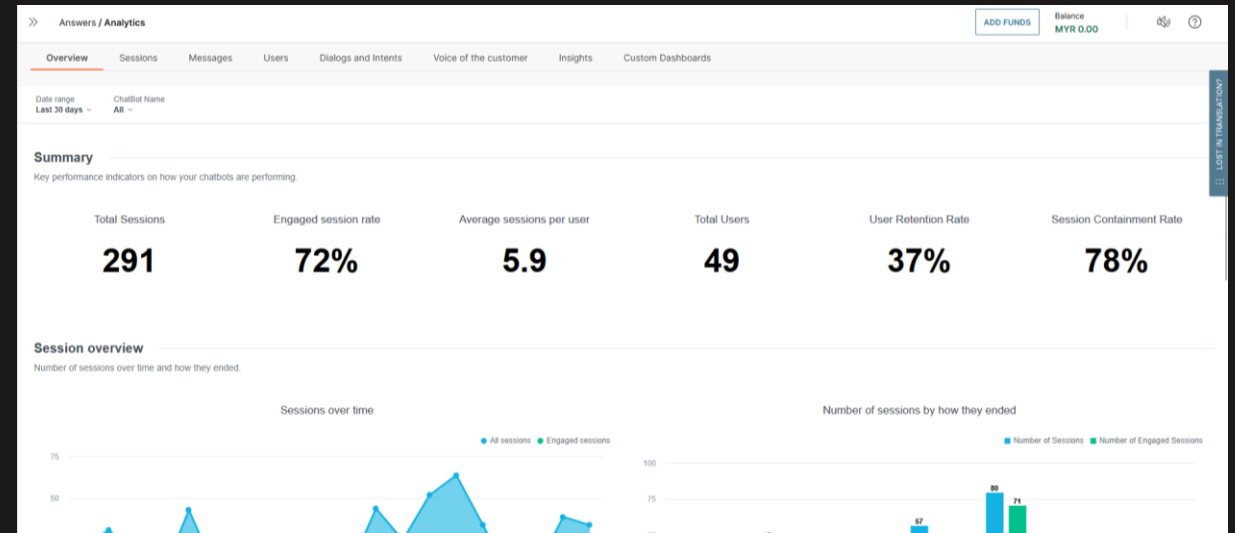
Tool: <http://drawio.com/>



# Essential Metrics for Chatbot Evaluation

# Standard and Advanced Analytics

- There are two types of Analytics Modules.
- Customers can choose either one, but not both.
- Customers can have advanced analytics by upgrading from the basic package.





## Key Metrics

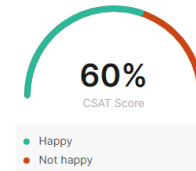
# CSAT

- This is the most direct and genuine data on how well we are meeting our customers' needs and expectations.
- High CSAT scores indicate that we are successfully meeting customer expectations, while lower scores highlight areas where we need to focus our improvement efforts. This feedback loop is essential for continuous growth and excellence in customer service.

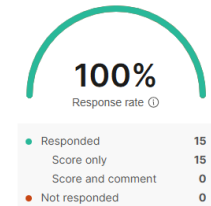
### User analytics

All chatbots ▾ | 18/02/2025 — 15/05/2025 ▾

#### CSAT breakdown by response



#### CSAT breakdown by response volume



#### Surveys

Rows per page: 10 ▾ | Showing 1-10 of 15

User ID #	Unique session ID #	Score #	Comment #	Surveyed #
9455782511138233	e06756f5-6b88-456a-84...	Happy		March 27, 2025 6:05 PM
28853843780926997	cad9d309-7430-4008-8a...	Happy		March 27, 2025 4:13 PM

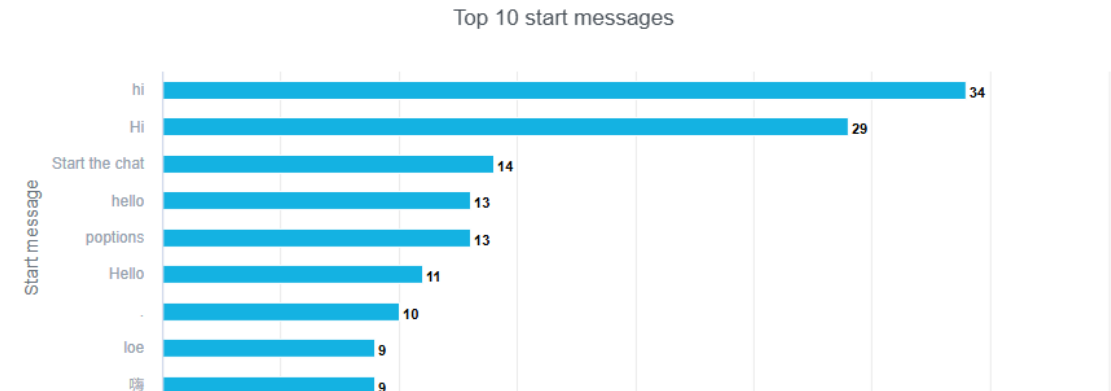


# User Message

- **Top Start Messages** can reveal trends in user preferences, allowing for more targeted and relevant updates to the chatbot.
- **Unhandled User Messages** help identify gaps in the chatbot's knowledge base and functionality.
- **Both** help in tailoring the chatbot's responses to better meet user demands right from the start.

## Top user start messages

Top messages users sent to start interacting with the chatbot.



## Unhandled user messages

Messages that did not pass the Get attribute element type validation or did not match with a keyword in the User input element.

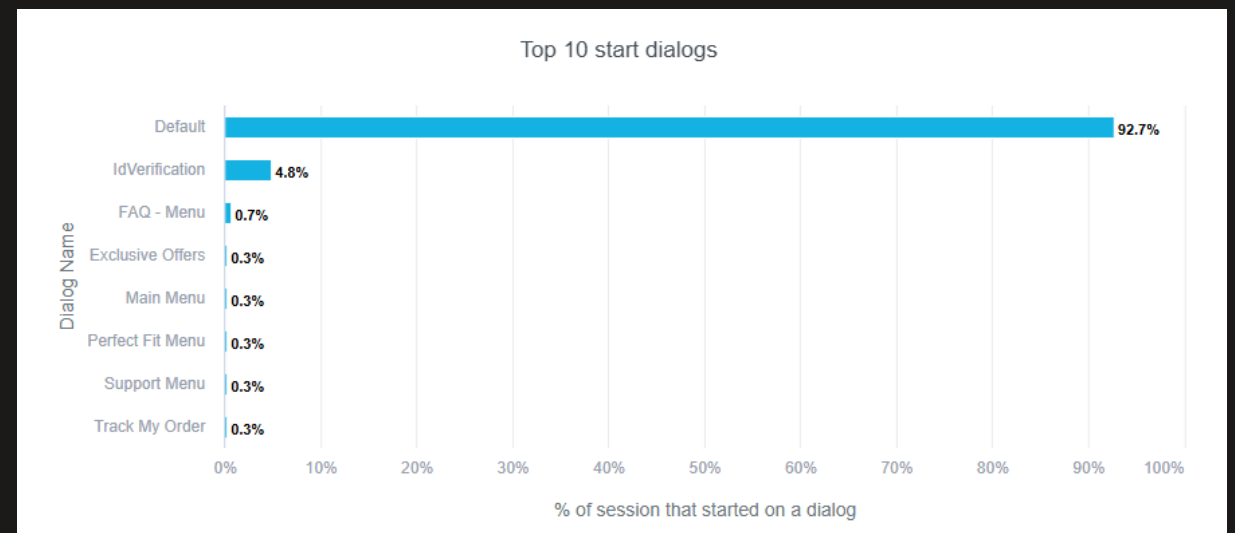
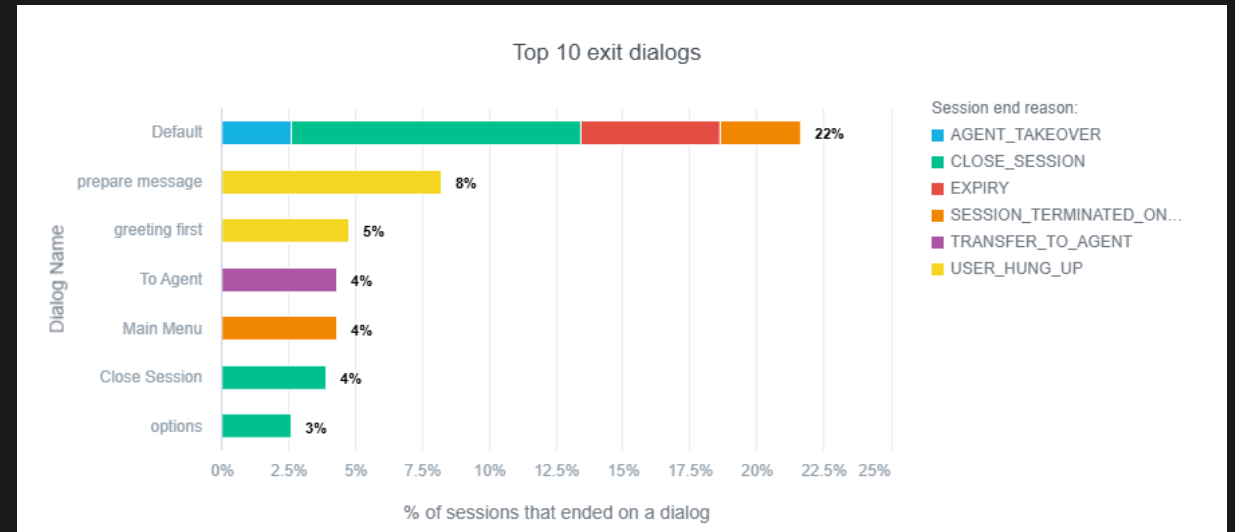
User messages not matched to keyword or failed attribute type v

Session Uncertain Message ▲	Dialog Info	Dialog element type
Kosice	NearestStore	GET_ATTRIBUTE_REPLY
Reset	Package_Group1	PROCESS_USER_INPUT
	Selected	PROCESS_USER_INPUT
Return Product	Continue	PROCESS_USER_INPUT
Slovakia	NearestStore	GET_ATTRIBUTE_REPLY
great	Dialog 1	PROCESS_USER_INPUT
poptions	options	PROCESS_USER_INPUT
quotation	PI - Motor Protect	PROCESS_USER_INPUT
request_claim	CI - Main Menu	PROCESS_USER_INPUT
yes	FAQs - Main Menu	PROCESS_USER_INPUT
嗨	Main Menu	PROCESS_USER_INPUT



# Top Start/Exit Dialogs

- Top Exit Dialogs help identify where users are most likely to leave the conversation. This can highlight areas where the chatbot may not be meeting user expectations or where the conversation flow could be improved.
- (Intent-driven Chatbot) Top Start Dialogs reveal the most frequent initial queries or topics users bring up. This helps in understanding what users are primarily interested in or concerned about.





# Thank You

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