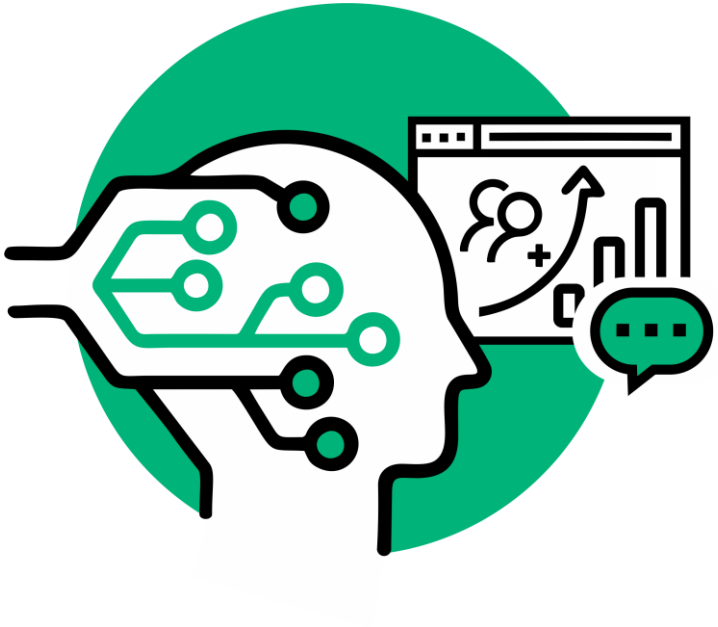
talentica
DREAM · BUILD · DISRUPT



Improving Product Adoption using Conversational AI

CASE STUDY : TALENTPOOL

Background

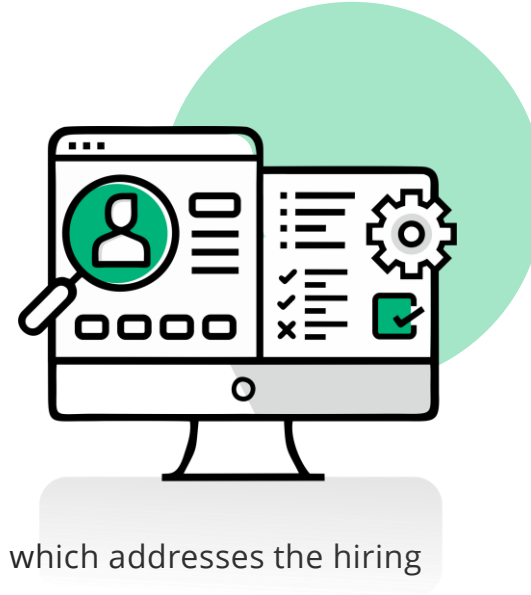
CLIENT
Talentpool

INDUSTRY
Recruitment Software

HEADQUARTERS
Pune

FOUNDED
2006

www.thetalentpool.co.in



Talentpool is a recruitment software which addresses the hiring needs of small and mid-sized businesses. Maya, a virtual recruitment assistant, helps in improving collaboration between recruiters, interviewers and hiring managers.

Challenges

To increase adoption and improve user experience for hiring managers and interviewers, Talentpool introduced a new template-based chatbot interface called *Maya.* However, with increasing impact radius, *Maya* started showing some limitations.

Shortcoming of Templates

Limited User Adoption

Due to the template-based approach, users had to return to the main menu for each new query, which was time-consuming and cumbersome. Its high number of cards on display made it less mobile-friendly.

Restrestricted Visibility

Hiring managers and interviewers could only access information set in the predefined flow. For additional/ aggregated information, they had to ask recruiters.

Hurdles in Implementing NLP

Lack of Conversational Flow

Maya was a stateless platform without a contextual understanding. But this was essential to make it conversational.

Architectural Limitations

Template-based platforms didn't support Natural Language Processing (NLP). Enabling NLP required an understanding of the user intent.

Solution

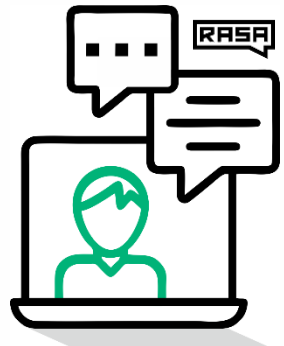
★ To overcome limitations of template-based UI, we considered implementation of **conversational AI.**

1 Selecting the right technology

Frameworks are either user-friendly like Google DialogFlow or developer-friendly like RASA.

Google DialogFlow is a template-based solution for chatbots. But when it comes to customization, it has some serious limitations. To overcome such barriers while developing *Maya 2.0*, we opted for RASA. It is an open-source platform that allows code modifications and the addition of customized pointers.

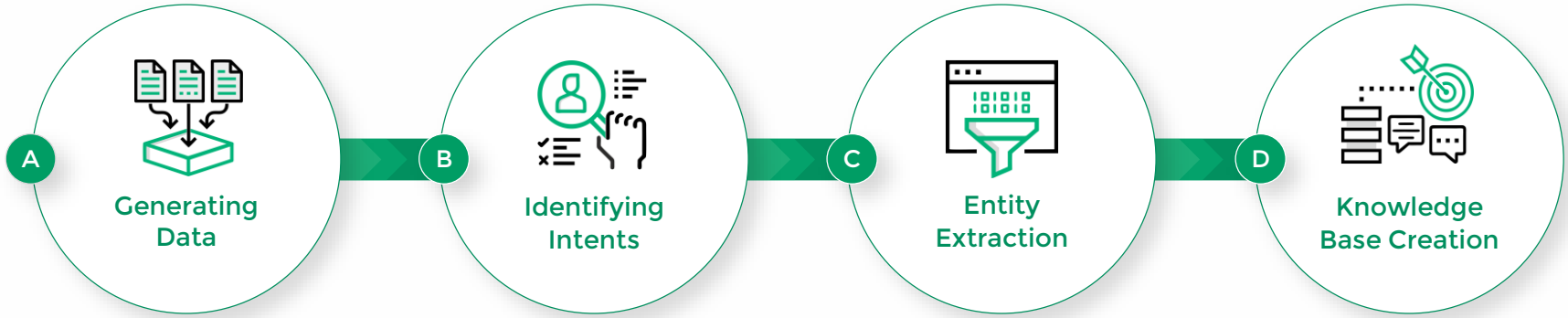
With RASA, it was easier to get a good grip over the entire system as access to code made finding loopholes and debugging simpler.



Solution

2 Building a chatbot using RASA

The successful implementation of RASA depends on proper selection of ML models and their right training to achieve the desired accuracy.



Solution

2 Building a chatbot using RASA

GENERATING DATA

ML algorithm performance depends a lot on the size and quality of generated data. We didn't have much real-time data like any new chatbot. To counter that, we generated data using flexible template-based generators based on DSL (Domain Specific Language).

IDENTIFYING INTENTS

Varying user interests and free-form texts are integral parts of a pure conversational chatbot. Using the training dataset, we optimized RASA's classifier algorithms to extract the right intents for hiring managers, interviewers, requisitioners, and employees submitting referrals.

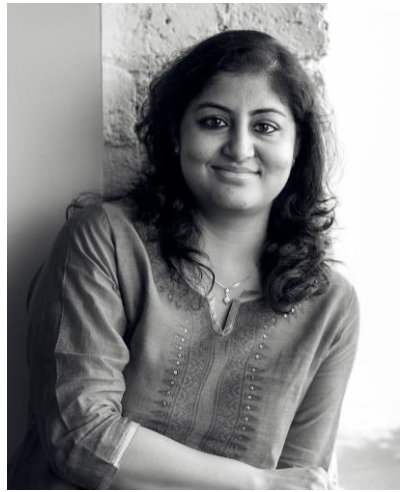
ENTITY EXTRACTION

Identifying intent is just one part of the solution. It is equally important to extract relevant information from a user's message, such as dates and addresses. We customized RASA NLU to extract different pieces of the required information.

KNOWLEDGE BASE CREATION

Integrating RASA with the Knowledge Base maintained the conversation's context and responded to the user queries accurately. We set the premise for creating relationships between the entities that will improve the user experience further.

We used an incremental approach, which handled new intents and entities using a template-based mechanism and retrained the model to manage them in the future.



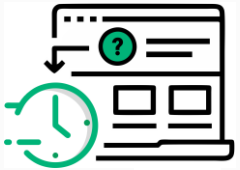
Maya was meant to respond to hiring manager queries just like a human recruiter. But the template structure was limiting in terms of the kind of questions that it could handle. With the conversational AI, *Maya 2.0* will be the virtual recruiter, in the true sense of the term.

POUSHALI GANGULY
BUSINESS HEAD, TALENTPOOL

Results

Higher
User Adoption

Chatbot's ability to adapt to Natural Language Understanding (NLU) reduced iterations and made it mobile-friendly. This, in turn, improved the user experience and increased adoption.



Faster
Query Resolution

AI/ ML helped identify contextual patterns in intent and entity. This ensured that users no longer had to conform to the template structure and go back to the main menu to initiate a new query.

Enabled
New Conversations

Using AI/ML and deep learning models, we helped the structure retrain, improve and evolve to guarantee better response and quick solutions for new queries.

Let’s Disrupt Together!

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