



**Harbinger Systems**  
Your partner in technology innovation

## Building a conversational chatbot by applying modern UX processes.

Harbinger helped a US-based mid-sized ISV build a next generation chatbot through UX enhancement.

### About Client

A mid-sized ISV in the US, providing software solutions for HRIS with cutting-edge technologies. Riding the AI wave, the company started building AI solutions in existing products for improved performance.

### Business Situation

- The company's HRIS product provides solutions for HR activities such as time-off, payroll, conference room booking, etc.
- The company, developed a chatbot solution for the conference room booking module of its product, but soon discovered that the initial release was not able to complete most workflows. It also required considerable human intervention to verify bot failure and move to the manual mode.
- The organization sought Harbinger's support in improving the workflows, results and ensuring a better user experience.

### Harbinger Solution

Since bots do not understand context the way humans do, chatbots are built with 'dynamic intelligence' that helps them understand human interaction via contextual communication. Taking this into consideration, a solution was built through the following steps:

#### Step 1: Requirement gathering and validation

Validation was done to ascertain the need for a chatbot solution, rather than looking at it just from a competitive perspective.

#### Step 2: Intent finalization

A single chatbot use case has various intents, which need to be identified to make sure that each conversation flow is attempted properly and completed successfully. To identify the intents, Harbinger conducted user interviews and surveys to define different personas, followed by stakeholder validations.

#### Step 3: Conversation flow design

Each intent has various paths to successfully complete the conversation flow. In this step, the flow is designed by considering the various possible utterances for each intent. All the happy path flows for each intent are defined.



**Harbinger Systems**  
Your partner in technology innovation

## Building a conversational chatbot by applying modern UX processes.

Harbinger helped a US-based mid-sized ISV build a next generation chatbot through UX enhancement.

### Harbinger Solution Cont...

#### Step 4: Information Architecture (IA) design

Since UX plays a vital role in defining IAs, the IA for each intent was designed considering the happy path and sad path for it. This helped ensure that the chatbot completed most conversation flows, with least human intervention.

#### Step 5: Response analysis

As conversation styles differ from user to user, the plan is to improve conversations in the future by capturing different styles and responding accordingly.

With the above steps, most dialog workflows were successfully handled and the chatbot success rate was raised notably. UX intervention helped the chatbot behave more 'human' through a better understanding of context.

### Benefits

- End users loved the chatbot solution, and user base for the solution increased drastically.
- The organization now has a unique next generation chatbot as a competitive feature in its product.
- Chatbot is able to handle most workflows; whenever the bot fails to find a solution, the transition from bot to human is automatic and smooth.
- Conversation flow completion rate increased notably.