

WHITE PAPER

# USING DECISION TREES IN CUSTOMER SERVICE





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### **INTRO**

Uncertainty is one of the most basic challenges we deal with as individuals and organizations. As customer service agents, it can be difficult to prepare for the huge range of issues that can be asked. For managers overseeing many people and struggling with turnover and onboarding, you want to ensure your department is producing consistent and quality results. While no one can map the future with certainty, tools such as decision trees can model how specific series of choices will play out. They transform the uncertainty of complex interactions and guide users along a concrete path. A decision tree for help desks or customer service can be created for two different purposes:

- **01** An interactive guide for self-service that customers use to solve their issues themselves
- **02** An internal system for agents to approach and solve problems in a consistent and structured manner

Best of all, if you are using a knowledge base, you already have the content and usage data to create and power decision trees. Guiding customers through the troubleshooting process to get the right answer is the key to efficiency. Decision trees will provide comprehensive answers that are consistent and quality assured. There's no reason to reinvent the wheel each time. According to the Consumer Reports National Research Center, more than 60% of all customers complain about these issues which can be solved via decision-trees:

- Long wait or hold times
- Phone menu doesn't have required option
- Transferred to a rep who can't help
- Repeatedly asked for the same information

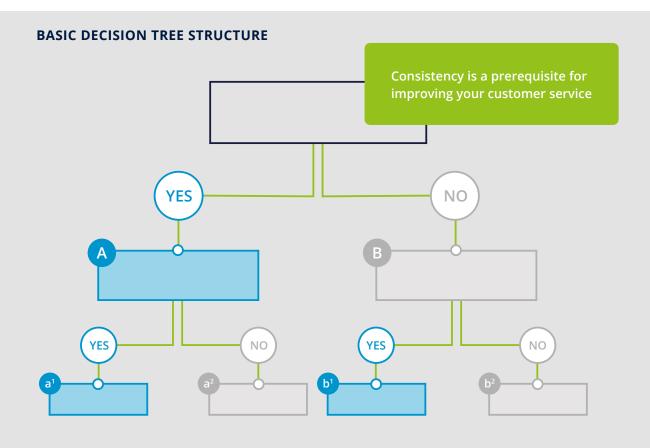
This white paper will look at decision trees as a valuable tool in customer service both on the management and agent level, options for implementing them and the current vendor landscape.

# WHAT ARE DECISION TREES?

Decision trees are support tools that use a flowchart or tree like model to visualize service and contact center processes.

— Since customer service is a form of personal troubleshooting with a customer, it is ideally suited to creating step-by-step guides for resolving issues. Decision trees depict this in the form of a question node that

then branches off into paths for yes and no based on customer input. This simple logic becomes a powerful tool that can be used in multiple service processes.



#### Background

— In the past, decision trees were static charts and often required coding skills. Today, they are interactive and guide the agent and customer step-by-step. This means agents can skip memorizing dozens or even hundreds of problem-solution pairs. They won't have to read through a wall of text in a Word document either. Decision tree technology has a long history in statistical analysis and was used extensively in medicine, psychology, and biology for analysis and prediction. Nowadays, there is an increased interest in decision trees due to the rise of machine learning and artificial intelligence.

### SIMPLIFY COMPLEX REQUESTS

— In order to easily handle complex requests, they must be broken down into a series of clearly defined steps. Building a simple if-then workflow helps to both clarify the process, steps and consequences.

Consider how the answer to simple questions like "Do you use Android or iOS?" or "Are you a U.S. citizen" influences what the next question in the series will be.

They can be implemented directly into your knowledge management platform and customer service software, so that agents can simply click through guided troubleshooting workflows based on quality assured content in your knowledge base.

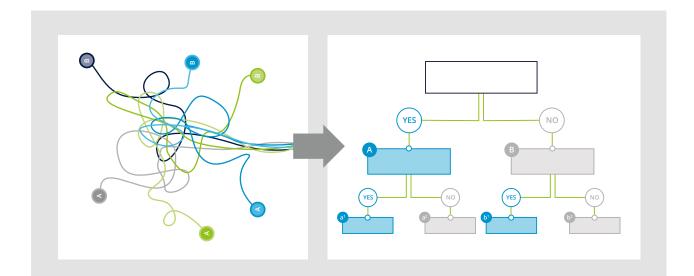
### **G** Technology is separating the leaders from the laggards. **J**

Andrew Mcafee, principal research scientist, MIT Center for Digital Business By building decision trees, agents are actively guided through service inquiries step by step. This ensures:

- · Consistent performance in your contact center
- No questions skipped or forgotten
- Increased FCR & fewer call transfers
- Higher agent satisfaction

Using a simple visual creation tool, users can create a troubleshooting workflow with branches based on customer responses, all without writing a single line of code.

Agents can focus on helping customers instead of searching and remembering things. The effects of this can be seen on the department level in higher First Contact Resolution rates (FCR), reduced Average Handling Time (AHT) and overall better customer experiences which impacts both NPS and CSAT.

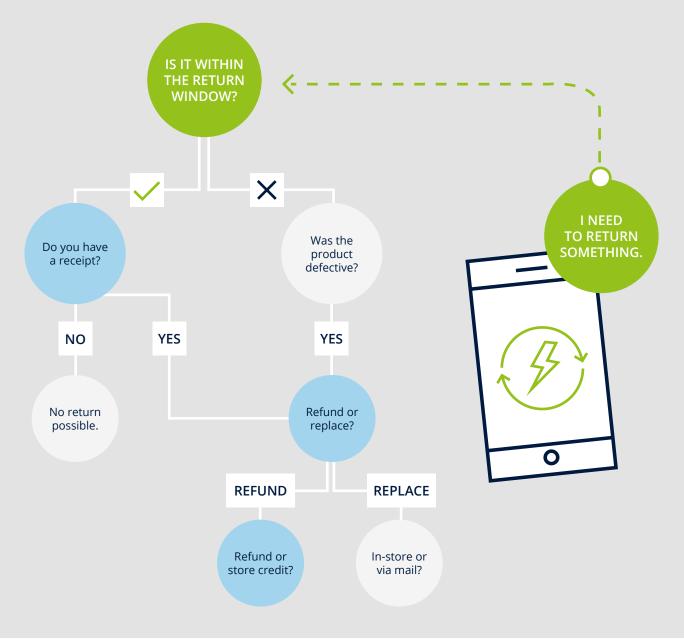


# **CUSTOMER SERVICE USE CASES**

— Consistency is a prerequisite for improving your customer service! By simplifying complex processes and reducing the amount of information agents are required to remember, they overcome common challenges such as:

- Difficulty finding information
- Long search times
- · Agents sticking too closely to scripts
- Long onboarding and training times
- · Inconsistent performance among agents or contact centers

### A BASIC DECISION TREE FOR PRODUCT RETURNS



### **EVERYONE BENEFITS**



### **CUSTOMER SERVICE AGENTS**

— Guided dialogues are the agent-facing side of a decision tree. Instead of the chart view with nodes and branches, the agent clicks through a simple text and image-based dialogue. They are widely used for technical troubleshooting, for example trying to solve an issue with Microsoft Windows. In the customer service world, it can be used for call scripting, step by step instructions or process manuals to replace long text-based documents.

Imagine calling your insurance company to change an existing policy. The agent needs to check several conditions including marital status, how long you have had the policy, whether coverage abroad is required and more. All these criteria influence the outcome and which, if any, solution is possible. With a knowledge base that includes decision tree technology, all these questions are pre-defined, and agents can easily go through a request step by step. This ensures consistency among agents, whether experienced or brand new. Customers are satisfied and get the help they need, faster and without transfers.

Do you need foreign credit limit?	History of diagnosis	:
N. S.	1. Are you a US offizer? Yes 2. Have you already done a credit assessment? Yes	60 Co
No Yes		
Previous	Next	

# MANY CHANNELS – ONE PROCESS

### 01 | SELF-SERVICE

Starting with the initial problem, decision trees enable customers to troubleshoot interactively and be guided step-by-step through the process. This is both easier and preferable from a user's perspective to navigating a long F.A.Q. or downloading help documents. Successful self-service requires both up-to-date information and a solid process underlying it. Decision trees integrated within your knowledge base provide both.

### 02 | CHATBOTS

Decision trees are also ideally suited for managing chatbots. In low-context situations involving simple transactions or inquiries, they ensure chatbots are useful and consistent.

Example use cases for chatbots include:

- Webinar registration
- Troubleshooting a printer problem
- Choosing a mobile phone plan
- Getting an insurance quote
- Ordering pizza

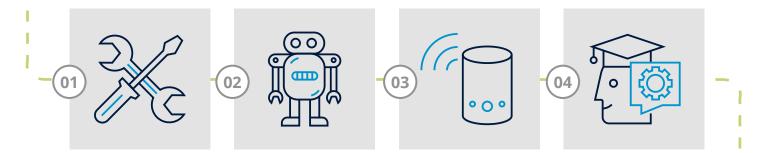
In addition, the same decision tree can be used for both internal and external users which helps to reduce the editorial effort and raise transparency within all channels.

### 03 | ALEXA & VOICE ASSISTANTS

Companies interested in using voice assistants like Alexa, Siri and Google Assistant for customer service are in luck. Since they are like chatbots, the voice skill can act as an audio interface for an existing chatbot. One insurance company for example, did exactly that enabling customers to get policy information and make transactions via Alexa (powered by a chatbot in the background).

### 04 | ONBOARDING & TRAINING

Decision trees not only help with direct customer service but also training. The question and response pattern can be used for your agent training to reduce on-boarding time by up to 80%. Even experienced agents benefit because they no longer need to know every possible complex request by heart. Having issues with agent turnover? Decision trees help you to make new hires productive from the very first day on the floor.



# **INDUSTRY USE CASES**

Formalizing and standardizing service processes across customer support channels benefits every industry. Here is a selection of example customer support use cases for various industries.



Troubleshoot outages

 Troubleshooting car warnings



#### Insurance

- Policy changes
- Policy eligibility
- Process claims
- Guided sales



### Medical

- Risk assessment
- Billing procedures
- Assigning specialists to patients



### Manufacturing

- On-site troubleshooting
- Remote troubleshooting
- Installation guides

# **BEST PRACTICES & GETTING STARTED**

— Guided dialogues are the agent-friendly interface that decision trees underpin. To get started, we recommend the following:

**01** Identify your simplest inquiries (for example those already answered in a FAQ).

**02** Map them out and limit them to no more than 5 subsequent questions.

**03** Deploy them in your contact center and monitor performance and feedback.

Once the first few guided dialogues have been successfully implemented and used, it's time to identify areas where the need is most critical. These will be more complex issues where the solution is often dependent on multiple factors and where agents lose a lot of time troubleshooting.

Complex requests and service processes must consider multiple conditions and scenarios meaning they consist of different branches based on customer answers. This is where a graphical user interface really shines, enabling users to visualize the process without complex coding or logic.

#### Don't Go Overboard

— Not every customer request requires a decision tree! The goal is to save time on complex inquiries while increasing consistency and service quality. The time saved is then available for other requests which will immediately increase your overall efficiency and number of handled calls.

A decision tree can be created in anywhere from fifteen minutes to several hours. However, the two most important factors are (1) selecting the right processes and (2) choosing the right people to build them. Subject matter experts should initially create the model to be later reviewed by the front-line agents who will actually use it. Creating the decision tree in the end, is the smallest and easiest part of the overall process.

### Hire Agents to be People not to Memorize Information

— Customer service representatives excel at dealing with people and having the experience and emotional intelligence to interact with a wide range of personality types and problems in many situations. We don't hire them to memorize information or be search ninjas. That's why empowering agents with the tools that let them focus on what they're best at is a critical part of creating a consistently excellent customer experience.

# **VENDOR LANDSCAPE**

**DECISION TREE TOOLS** 

 As organizations continue to pivot towards more customer-focused strategies and more importance is placed on the customer experience, decision trees are emerging as more than just a single feature, but a critical tool in the overall customer service toolbox. Vendors in the customer and IT service fields may offer them as features within a larger piece of software or as individual standalone tools. The chart below outlines the major tools for these industries and where they stand in terms of suitability.

#### **VENDORS**

- Dezide
- ProcedureFlow
- Zingree
- Upland RightAnswers
- Compass



### Vision (Individual app vs. Platform)

# CONCLUSION

Implementing consistent service workflows via decision trees will make agents more efficient and customers happier. Moreover, decision trees can and should be used as the basis for customer-facing self-service processes on your website. For many millennials this is not even the future, this is what they expect right now. In addition, existing decision trees can be combined with AI and natural language processing to form the brains of your chatbot or even Skills for voice assistants such as Alexa!

Finally, decision trees can be integrated into 3rd party applications such as Zendesk for ticketing or Salesforce Service Cloud. With these integration capabilities, companies will get more out of their existing must-have applications.

### **ABOUT UNYMIRA**

**Unymira** is a provider of customer service and enterprise knowledge management software solutions. It transforms how businesses engage with customers and fosters customer success. Unymira's knowledge management platform centralizes internal knowledge, captures new customer service insights and empowers agents to provide better service. This creates a future-proof foundation for any customer service strategy to deploy chatbots, voice assistants, self-service and more.

Learn More: www.unymira.com/decisiontrees



### **IMPRINT**

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