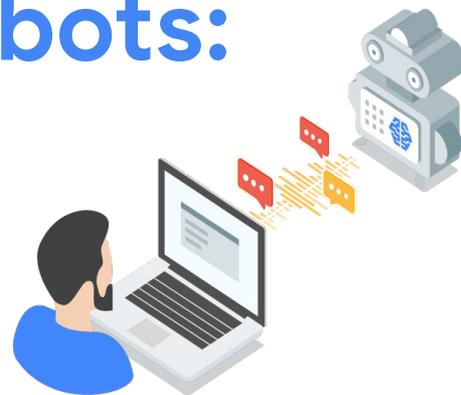


# Building Enterprise Voicebots: A Guide for Success

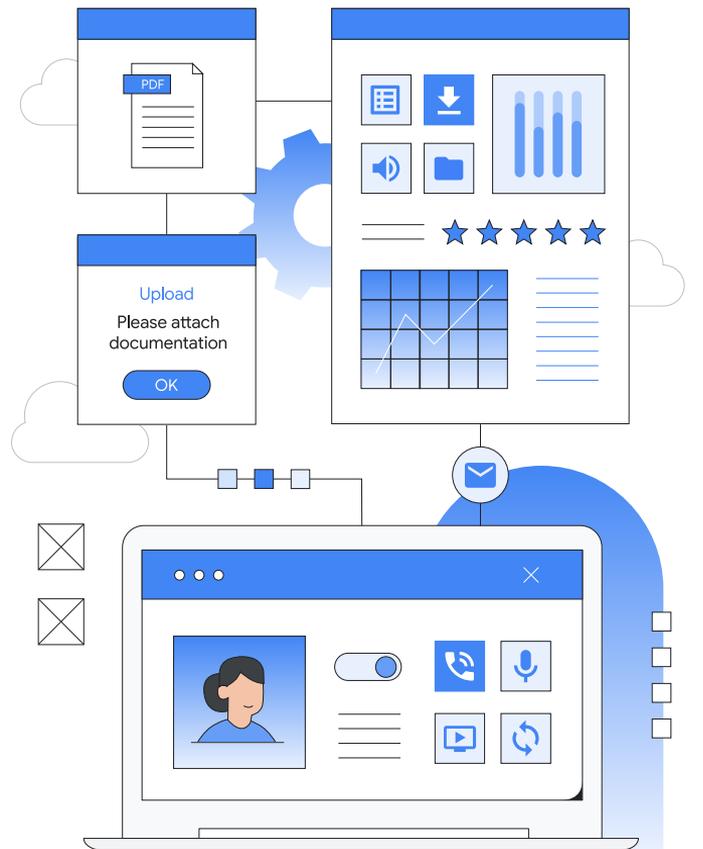
Nick Dokich



# Welcome!

## Agenda:

- Why conversation is so important
- How do I prioritize in the context of my current work?
- What challenges does Enterprise have?
- How do I properly use LLM/GenAI in my process to build conversational experiences?
- How Dialogflow and CCAI tools can help development & implementation



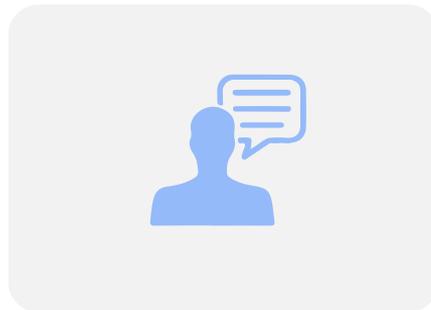
# Who am I?



Turf  
Specialist



Tar Heel



AI  
Practitioner



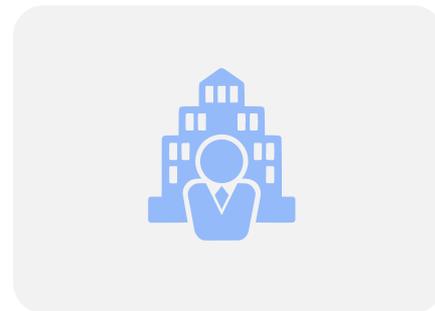
Builder



Conversational  
Designer



Avid Traveler



Enterprise  
Consultant Google

What is the goal?

To get the right information, to  
the right person, in the right way,  
at the right time.

# Conversation is Critical for Society

There would be no:

Buildings

Roads

Stories/Books/TV/Movies

Without communication there would be no ability to build as a group. Communication, specifically written words and speech are inherently human.



# Conversational Types



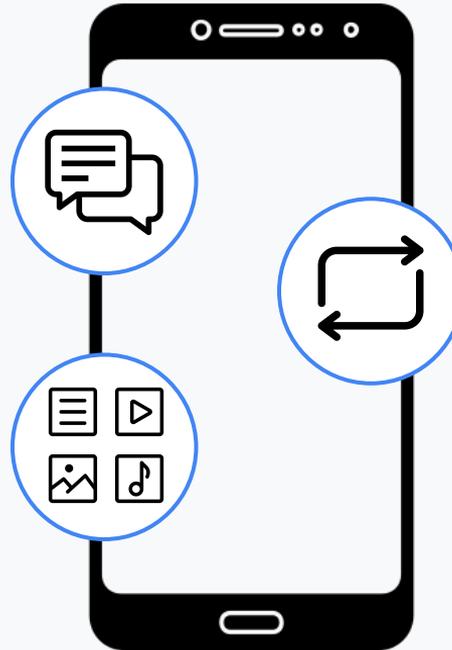
## Informational

Find the exact answers you are looking for quickly using natural language queries



## Transactional

Tasks that once needed a human like checking order status or processing a return are easily handled e2e automatically



## Generative

Combined with Informational & Transactional these to create new, magical experiences

- Generate content in the best format for the question and audience - novices to experts
- Help users by answering complex questions and performing tasks using site + world knowledge

# Informational & Transactional

## Informational

Understands questions users have for organization. Ex- Quick answers, facts, FAQs

How much PTO do I have?

How many new hires have started this week?

### Hyper-personalized Responses

Presents specific answers based on user profiles, CRM data and back-end systems

## Transactional

Fulfills task requests by users. User tells system to “do” something.

I want to take September 4th through the 10th off.

I want to split my payment for the CNC Machine. 50% today and 50% net 90.

# Unlocking a plethora of use cases for enterprise

Order food



In-car assistance



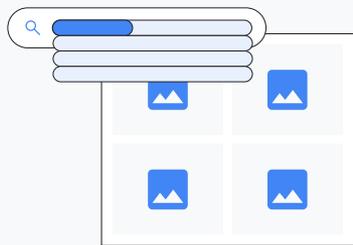
Conversational commerce and travel



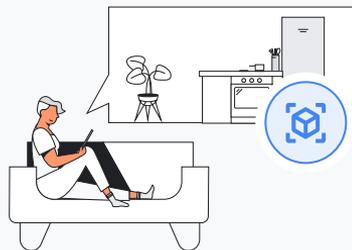
Virtual digital assistants



Generative search



Virtual AR showrooms



Internal use cases



Contact centers



LLMs bring new abilities  
to Conversational AI... **but...**

### LLMs

Feel human



Problem solvers



Lower effort



Generative



...there are additional challenges  
for Enterprise

### Enterprise

Data privacy, compliance



Legacy Systems



Integrations



Scale



Grounded in your data



Tight business logic



Brand consistency

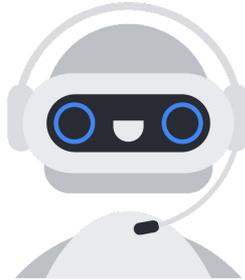


Cost



Google Cloud Generative AI

# Enterprise is not a greenfield



# ABCUT - A SOMEWHAT FAKE USE CASE

## Stats

1250+ Employees, 3 Locations



250 customer service reps



500 person warehouse



150 person inside sales team



Custom waterjet & CNC Manufacturing for  
both public & private sectors

FLOORING

TURF

METALS

FOAM PACKAGING

SIGNAGE

CUSTOM APPLICATIONS

*FAST AND RELIABLE SERVICE FOR YOUR  
PROJECT—BIG OR SMALL, WE DO IT ALL!*

# VCT & LVT



# Carpet



# Turf



# How to Prioritize? 4-Box Model



## Potential Impact

What is the functional uplift?

Average Handle Time (AHT)  
Cost per Contact  
Cost per Transaction



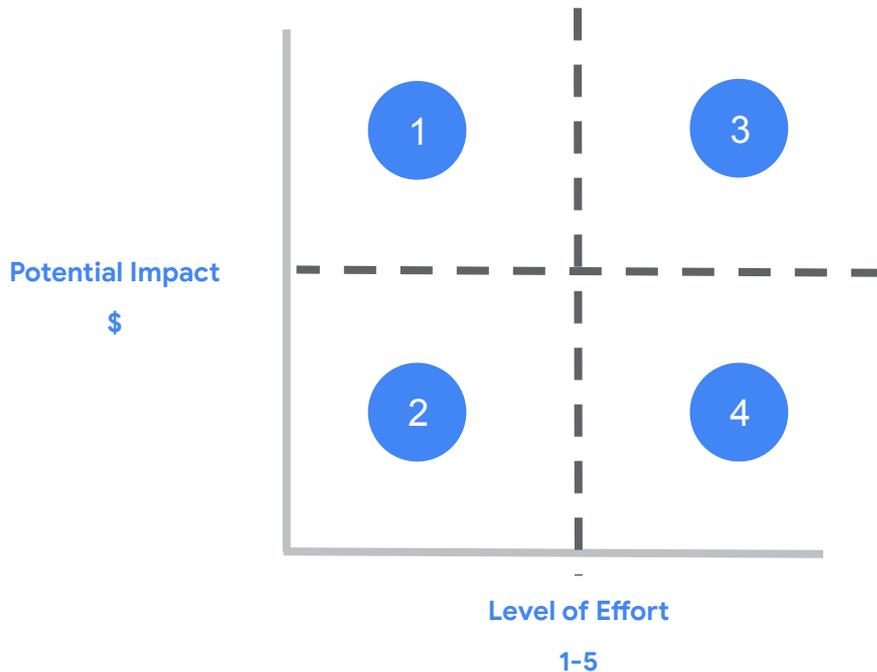
## Level of Effort

What is the time/cost to implement?

Time (w/ or w/o GenAI)  
Software/Hardware  
Feasibility (in context)  
Business Rules/Process

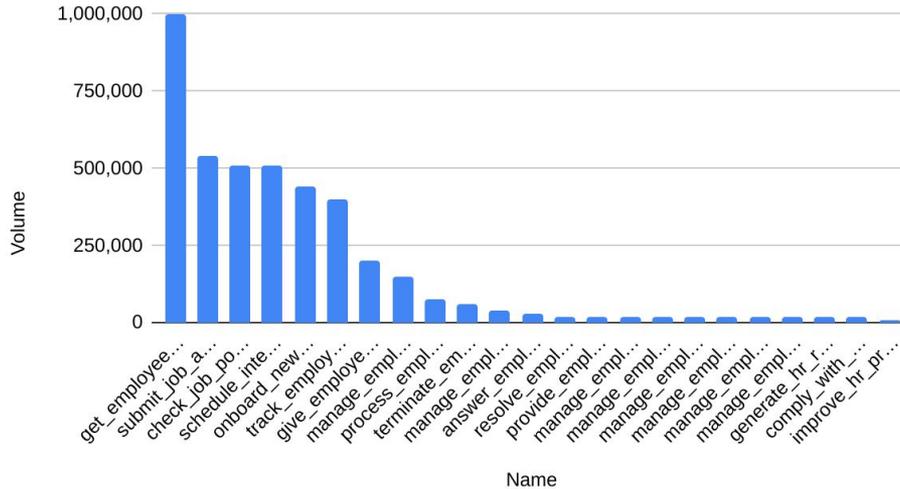
# 4 Box Model

- ① **High Value, Low Effort** These are easily your “priority”. Can use GenAI features or standard flows
- ② **Low Value, Low Effort** e.g. FAQs, perfect for GenAI, could be accepting of higher risk
- ③ **High Value, High Effort** “heavy” functionality and experiences, require high level of API readiness
- ④ **Low Value, High Effort** could be due to outside factors, business rules. Should be deprioritized unless otherwise stated



# Example Use Cases - ABCUT

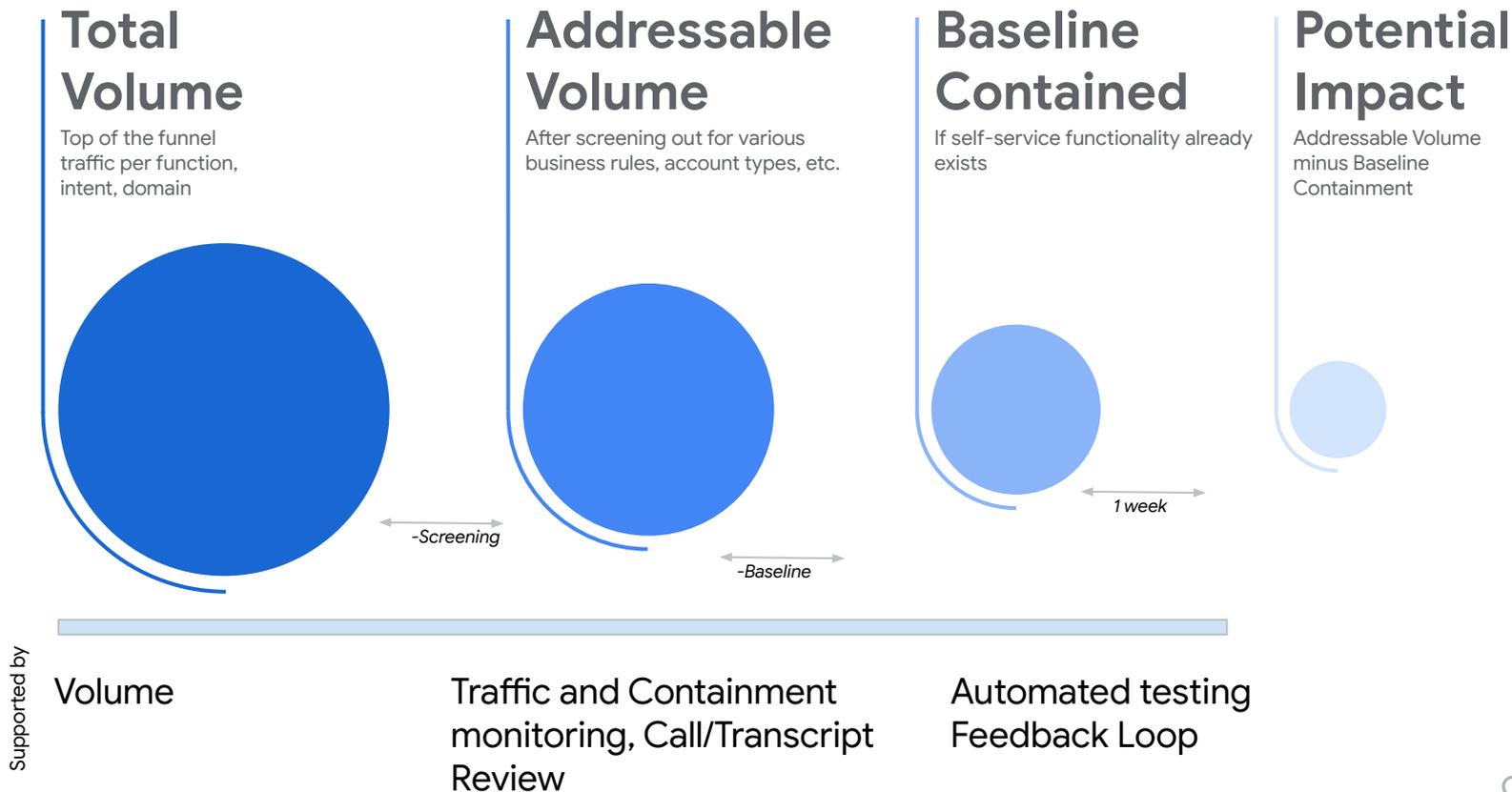
Functional Volume



## Examples:

- PTO balance
- PTO request & approval
- Time keeping
- Open Enrollment FAQs
- Open Enrollment
- Process I9 (API will be ready in 6 months)
- Performance Metrics (widgets created)
- HR FAQs (from handbook)
- Proactive onboarding messaging
- Recruitment SMS
- Sales/Design Quotes - GenAI

# Defining Potential Impact



Volume != Addressable Volume != Potential Impact



## Defining Potential Impact



Average Handle Time

24hr Containment

72hr Containment

# Cost per Contact



## Call Volume

The total contacts for a specific interaction/function/intent/agent group



## Average Handle Time

The total time spent on all calls or interactions, then dividing by the number of calls or interactions.



## Hourly Rate

Average \$/hr rate for contact center employee (specific to domain/function)



**Potential Impact - \$1097.50/day**

Product FAQs



X



X



1000/day

3 mins

\$21.95



**Potential Impact - \$1646.25/day**

Custom Jobs (Tile, VCT, Turf)



X



X



100/day

45 mins

\$21.95

# Cost per Transaction



## # of Interactions

Based on the context of your use case. Could be number of employees, number of users, etc



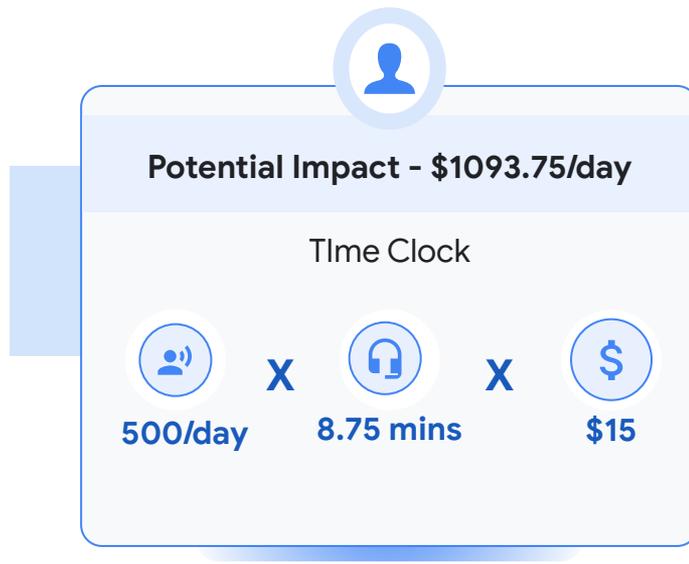
## Average Time to Complete

The total time spent on completing the action. Could include button clicks, searching, physically walking/using hardware. Include only time spent on interaction, not time waiting for approvals/processes



## Hourly Rate

Average \$/hr rate for contact center employee (specific to domain/function)



# Define Level of Effort

## 1-5 Scale

1 - 2 Weeks

2 - 1 Month

3 - 2 months

4 - 3 months

5 - 4 months

## Take Inventory

Always check for TP before sitting down. Look at your current taxonomy, apps, websites, content, APIs etc.

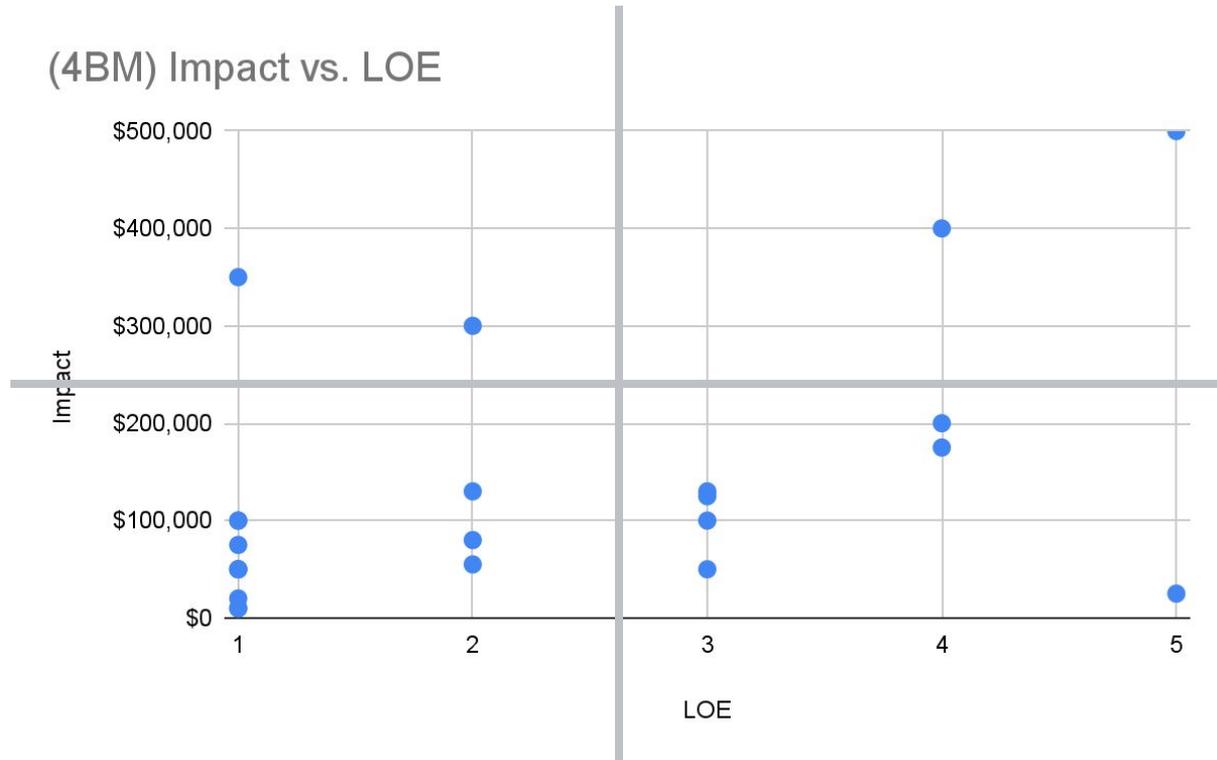
## Define Backend needs

What outside of the agent experience is needed? Are APIs easily accessible? Are data formatted for conversational use cases?

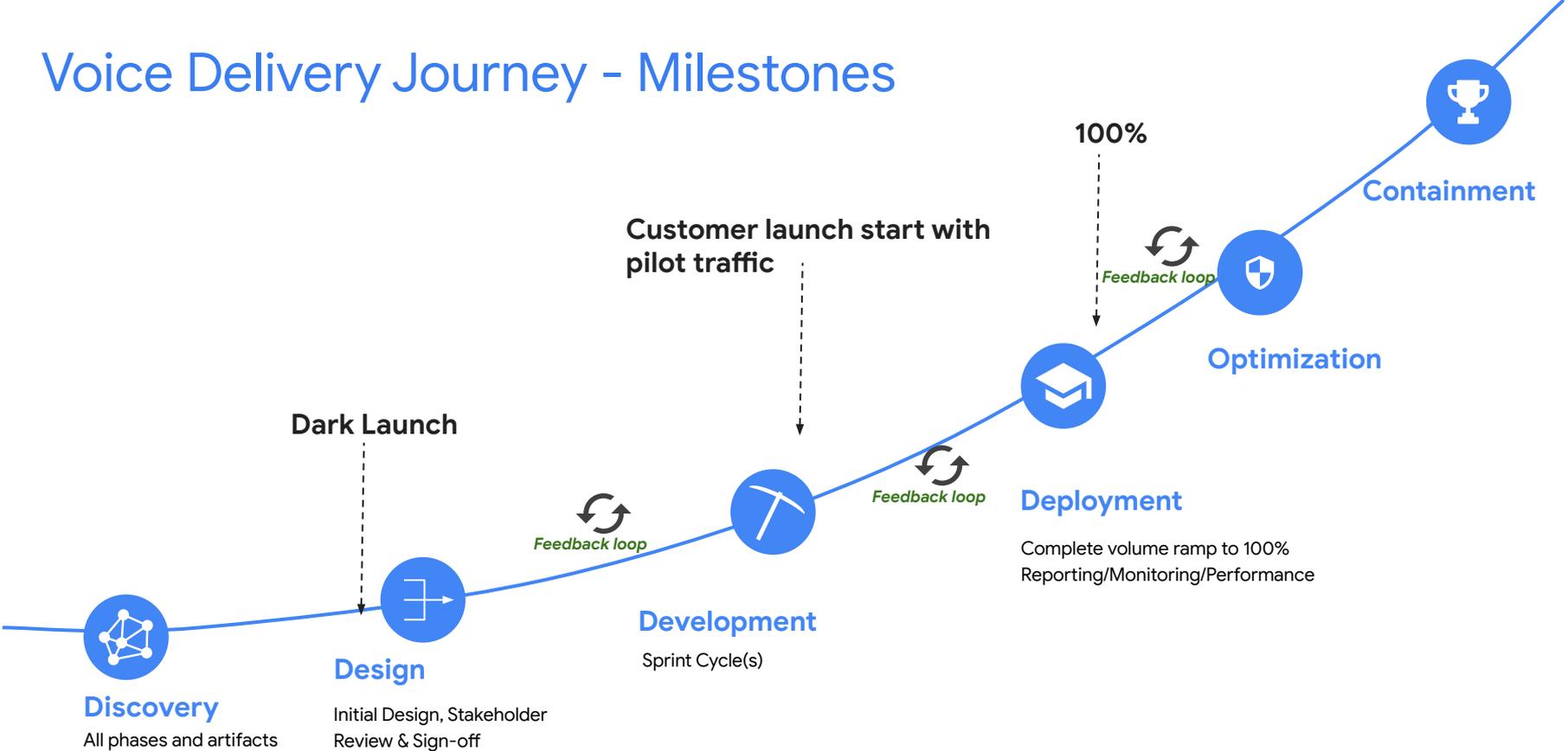
## Build & Break

Who is going to be doing the work

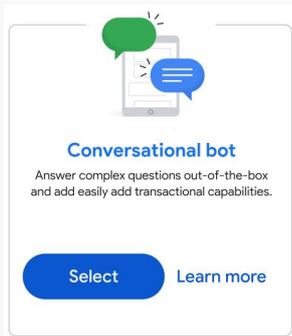
# Four Box Model (4BM)



# Voice Delivery Journey - Milestones



# Building bots is faster and easier than ever

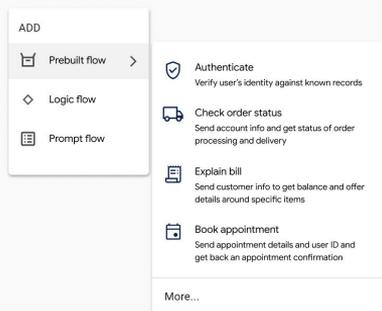


**Conversational bot**  
Answer complex questions out-of-the-box and add easily add transactional capabilities.

Select Learn more

## Auto-create from your content

Start with as little as your website or other business documents. Your bot is created in a few clicks and can find answers to complex questions using the content.



ADD

- Prebuilt flow >
- Logic flow
- Prompt flow

**Authenticate**  
Verify user's identity against known records

**Check order status**  
Send account info and get status of order processing and delivery

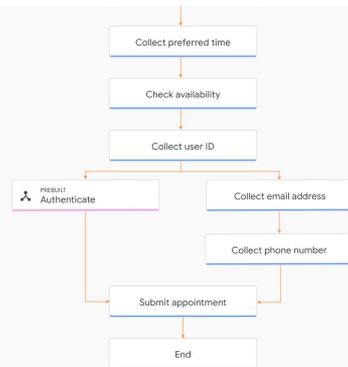
**Explain bill**  
Send customer info to get balance and offer details around specific items

**Book appointment**  
Send appointment details and user ID and get back an appointment confirmation

More...

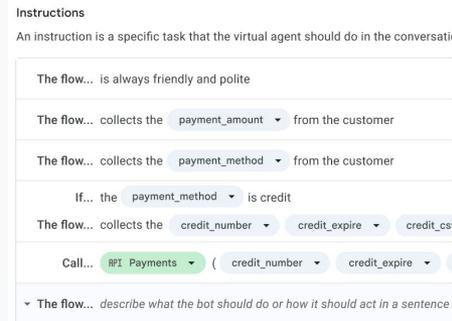
## Leverage prebuilt flows

These handle common tasks like authentication and checking order status and can be added to you bot in a single click. Then, just set up your API according to the flow instructions.



## Graph your business logic

Intuitive UI lets you map your business logic in minutes as AI takes care of all of the possible transitions dynamically



**Instructions**  
An instruction is a specific task that the virtual agent should do in the conversati

The flow... is always friendly and polite

The flow... collects the payment\_amount from the customer

The flow... collects the payment\_method from the customer

If... the payment\_method is credit

The flow... collects the credit\_number credit\_expire credit\_cs

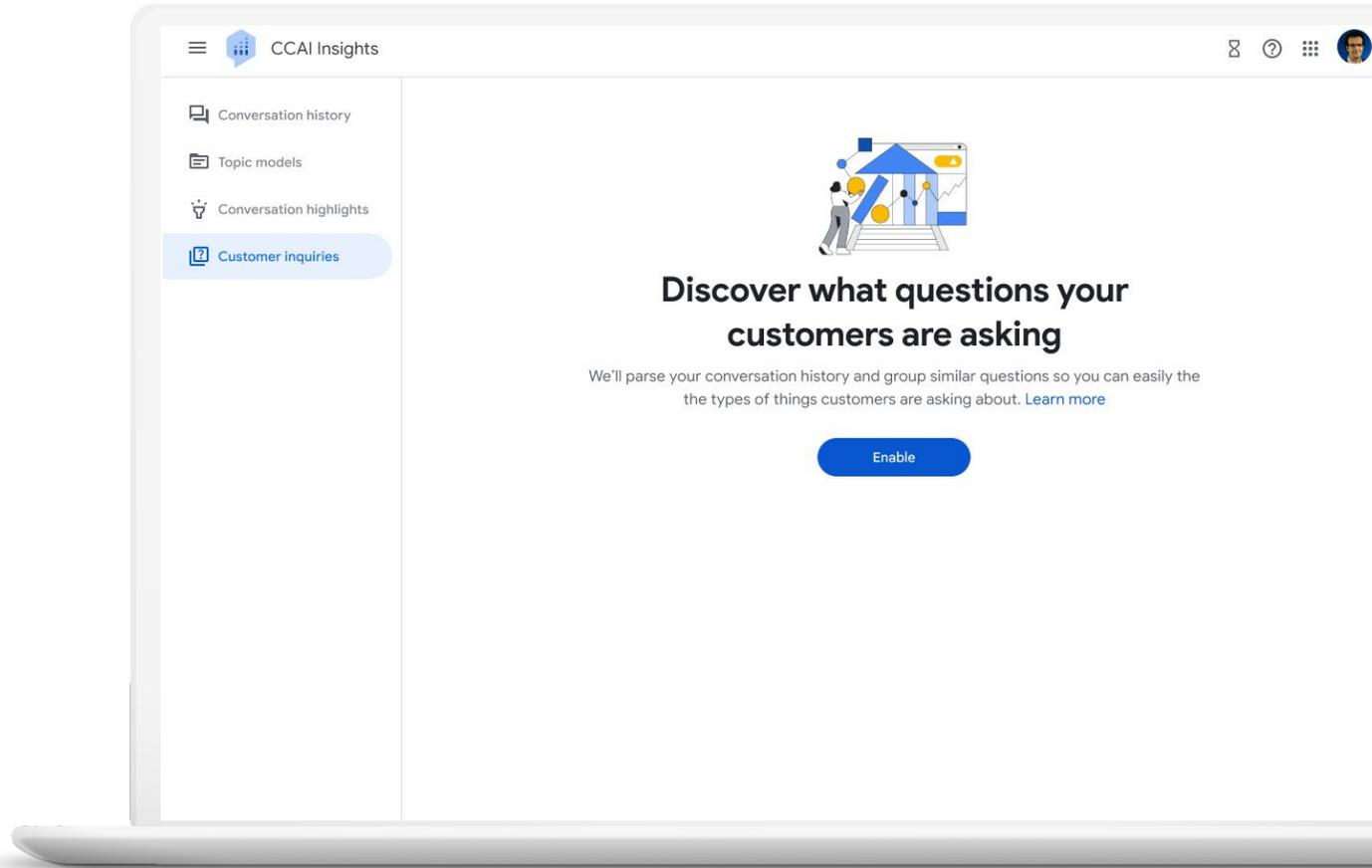
Call... RPT Payments ( credit\_number credit\_expire

The flow... describe what the bot should do or how it should act in a sentence

## Create a flow using just natural language

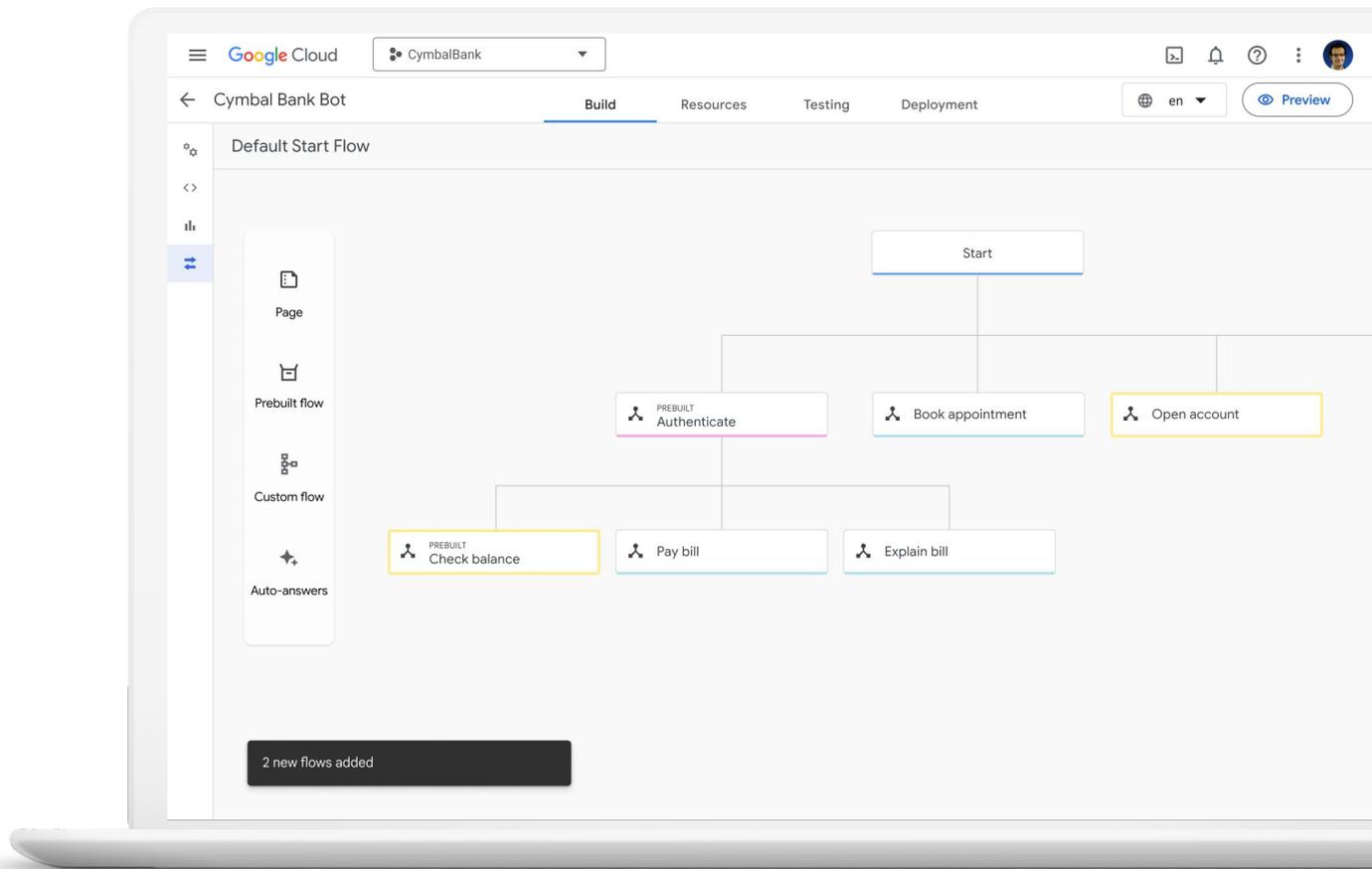
Simply describe what tasks the flow should complete including what information it should collect and which APIs to call

CCAI Insights automatically surfaces most-asked questions and provides AI-generated answers



Selected topics can be automatically added to your bot as flows.

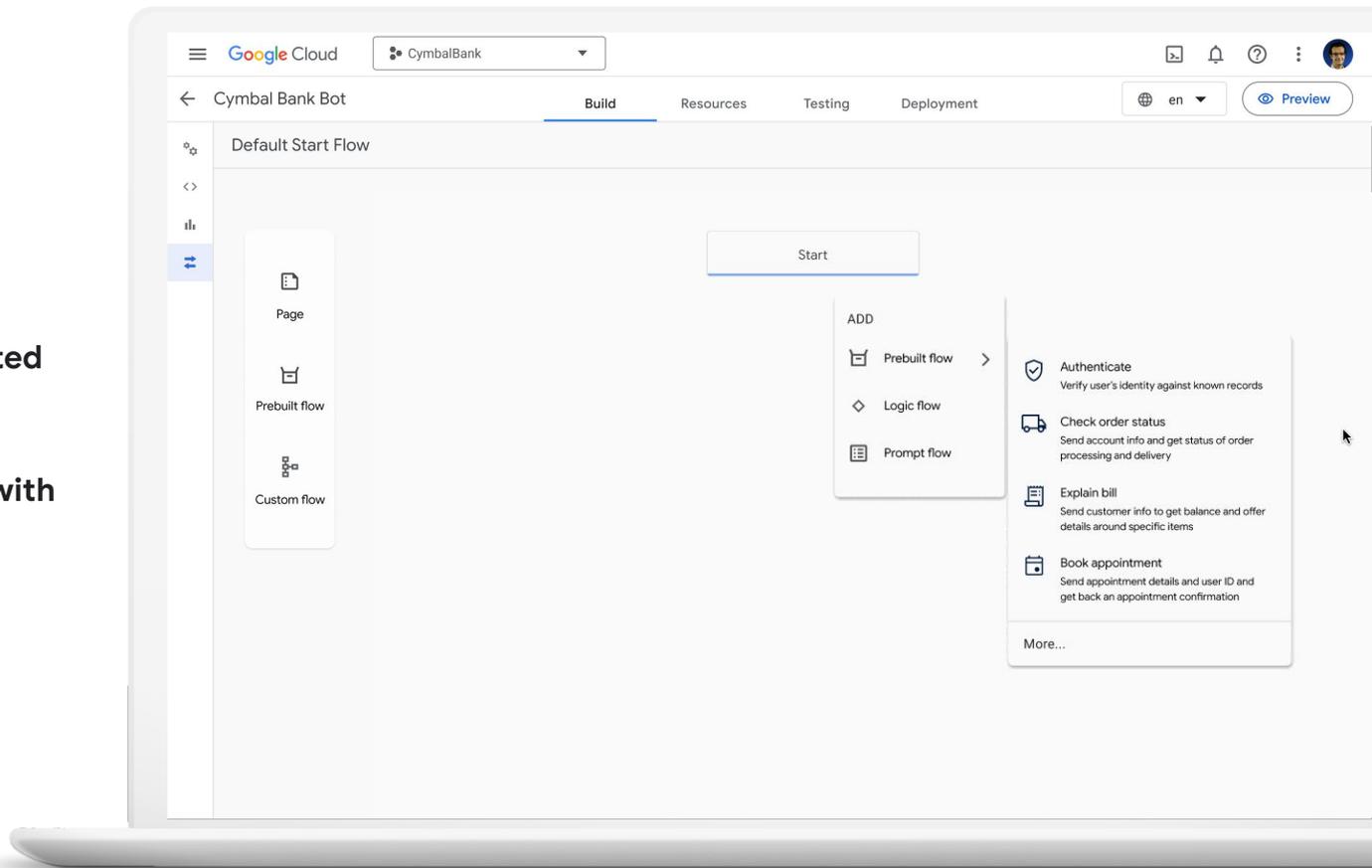
We'll even auto-detect topics that can be covered by prebuilts.



Leverage prebuilt flows

**Selected topics can be exported and added to your bot.**

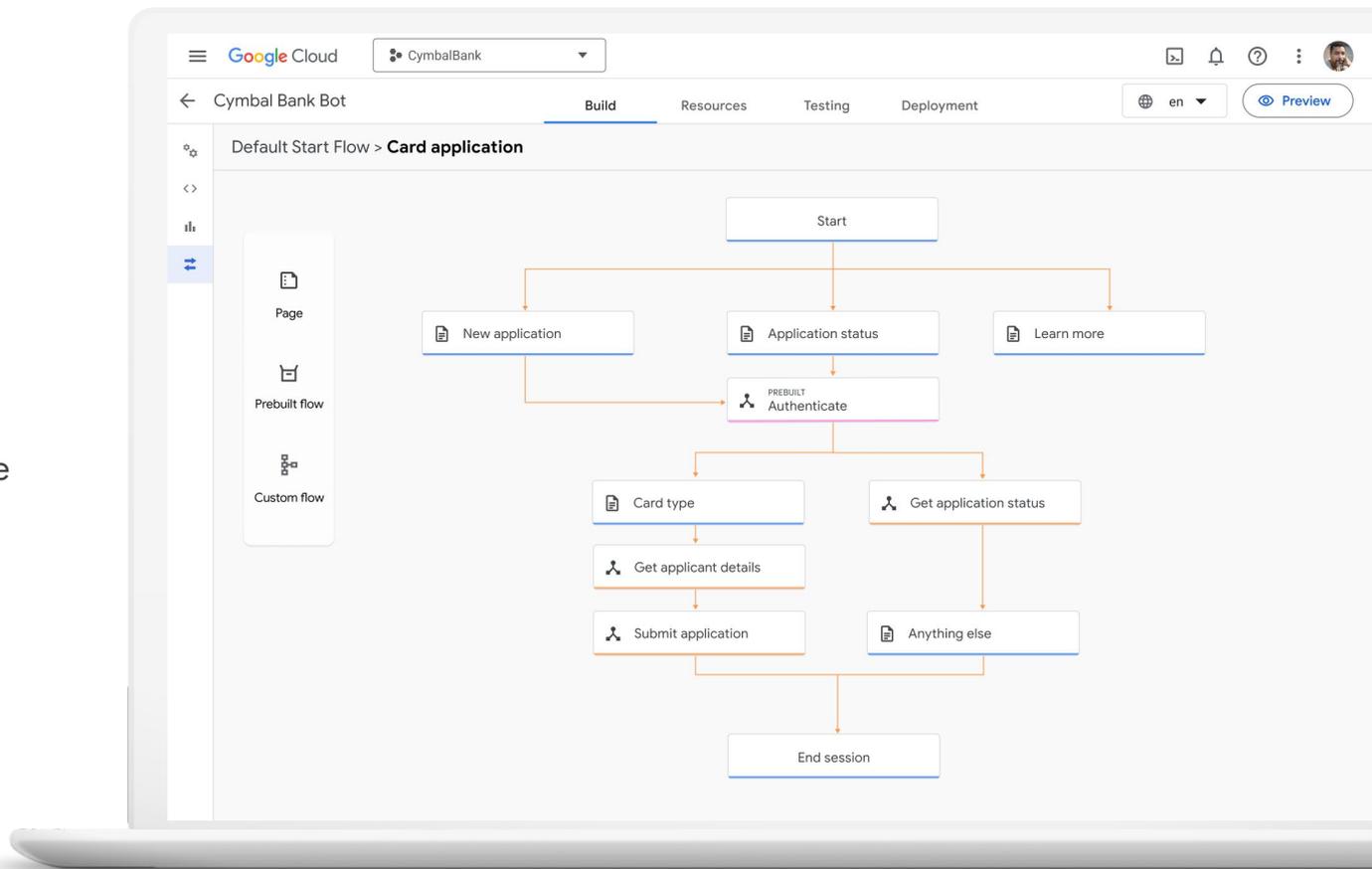
**We'll even automatch topics with available prebuilt flows.**





Graph your business logic

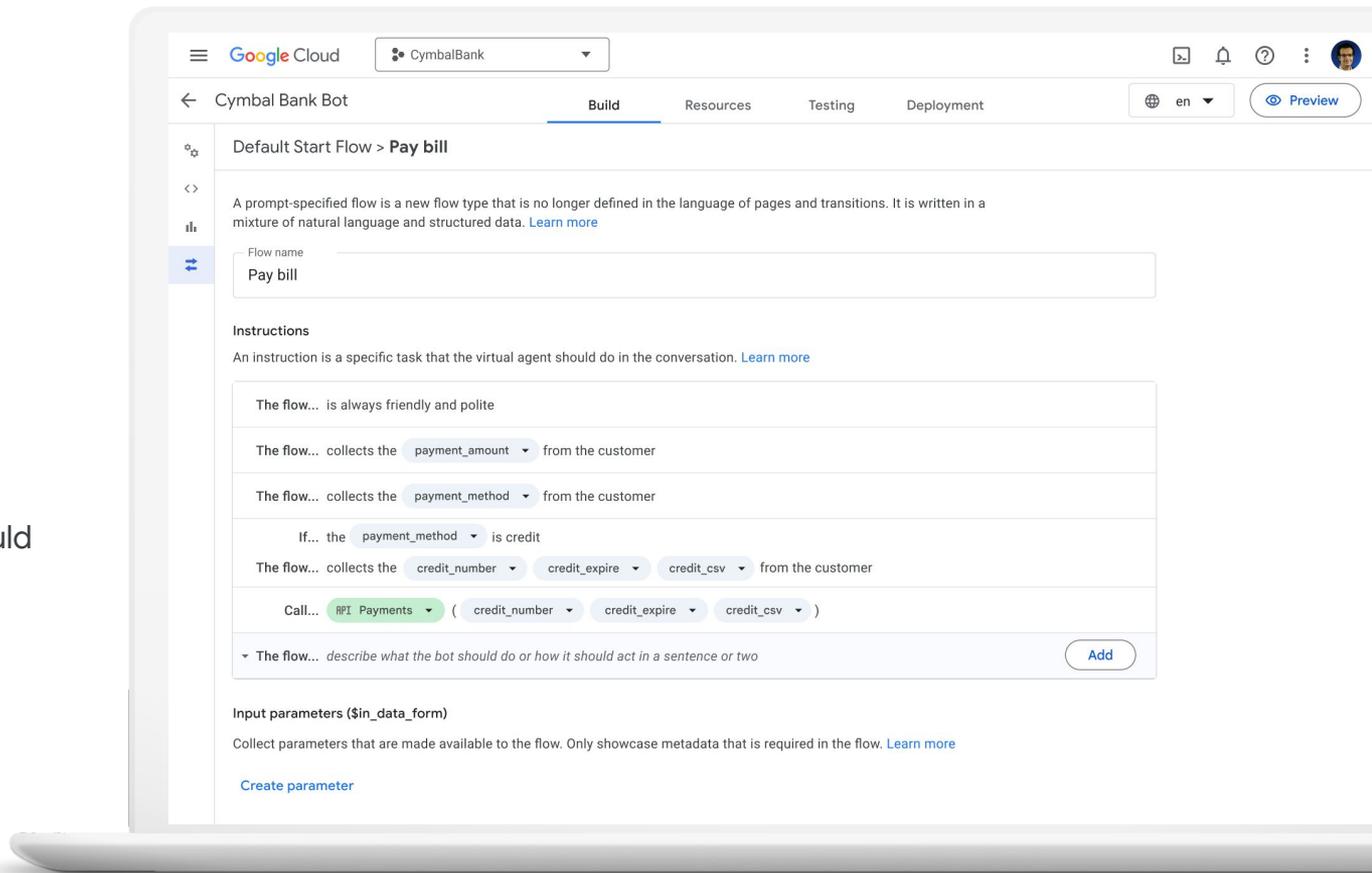
Intuitive UI lets you map your business logic in minutes as AI takes care of all of the possible transitions dynamically



Use natural language

Finally, you can create flows using just natural language instructions.

This makes creating a bot as easy as explaining what it should be able to do to a human.



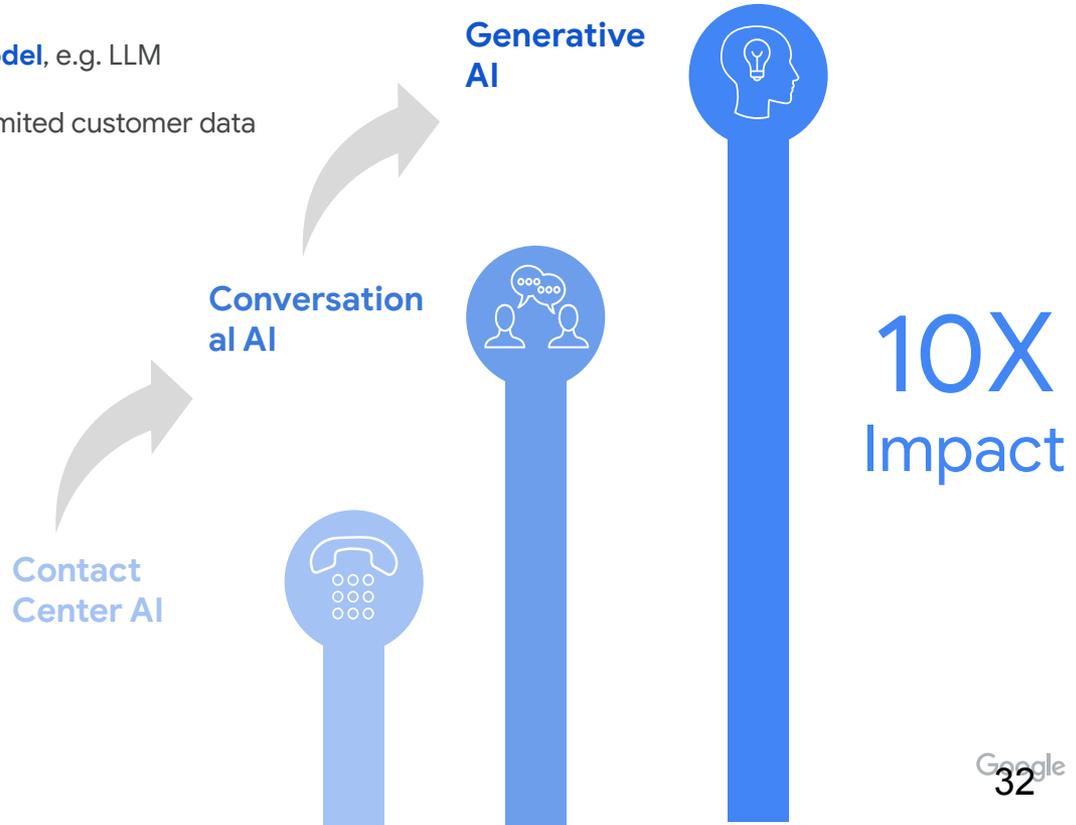
The screenshot displays the Google Cloud Dialogflow console interface for configuring a flow named "Pay bill". The interface includes a navigation bar with "Build", "Resources", "Testing", and "Deployment" tabs. The main content area is titled "Default Start Flow > Pay bill" and contains the following sections:

- Flow name:** A text input field containing "Pay bill".
- Instructions:** A section for defining tasks for the virtual agent. It includes several instructions with dropdown menus for parameters:
  - "The flow... is always friendly and polite"
  - "The flow... collects the `payment_amount` from the customer"
  - "The flow... collects the `payment_method` from the customer"
  - "If... the `payment_method` is credit"
  - "The flow... collects the `credit_number`, `credit_expire`, `credit_csv` from the customer"
  - "Call... `RPI Payments` ( `credit_number`, `credit_expire`, `credit_csv` )"
- Summary:** A dropdown menu with the text "The flow... describe what the bot should do or how it should act in a sentence or two" and an "Add" button.
- Input parameters (\$in\_data\_form):** A section for defining parameters available to the flow, with a "Create parameter" link.

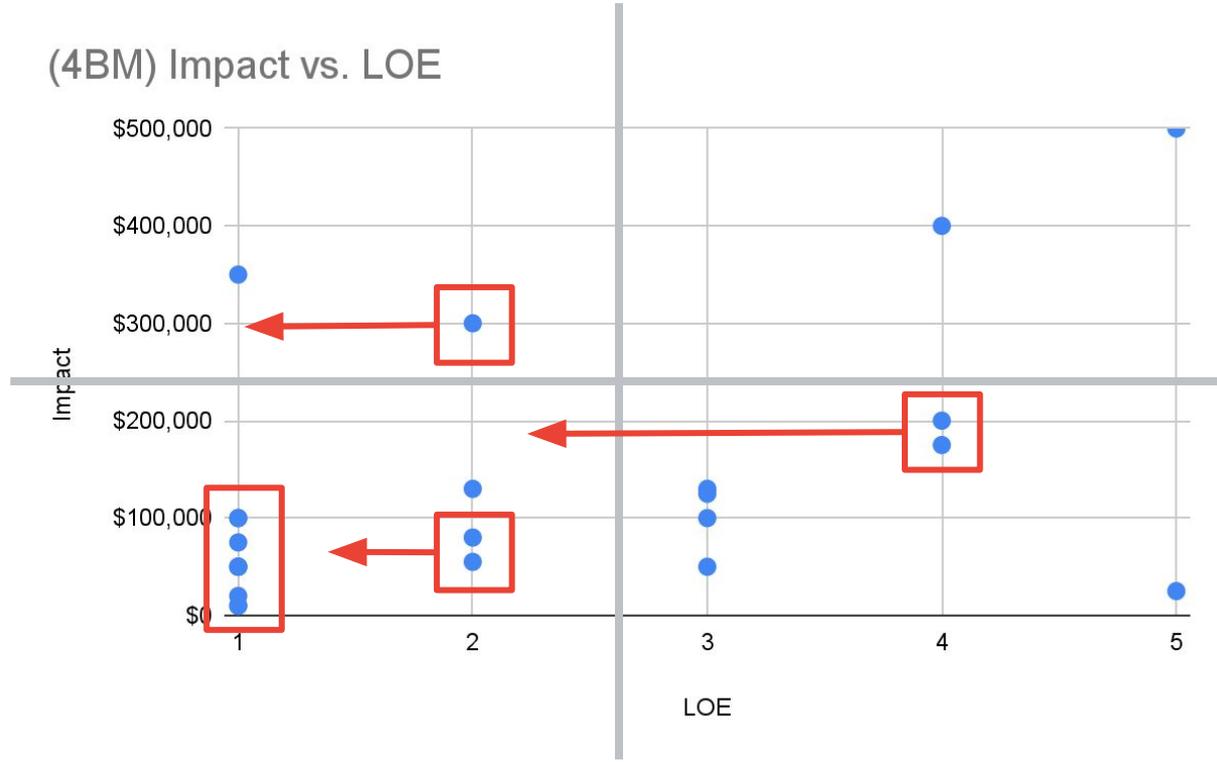
# Conversational Development | GenAI

Where does it fit in the life cycle? It's about using the right technology application.

- ④ **Shift from Transformers to Generative model**, e.g. LLM
- ③ **Graduation to high quality baseline** with limited customer data using generative models
- ② **New use cases** will emerge from the scale and traction gained from Telecom and Banking, as contact center “heavy” industries
- ① **Enhancement of product suite:**
  - Prebuilt “components”
  - LLM-driven features

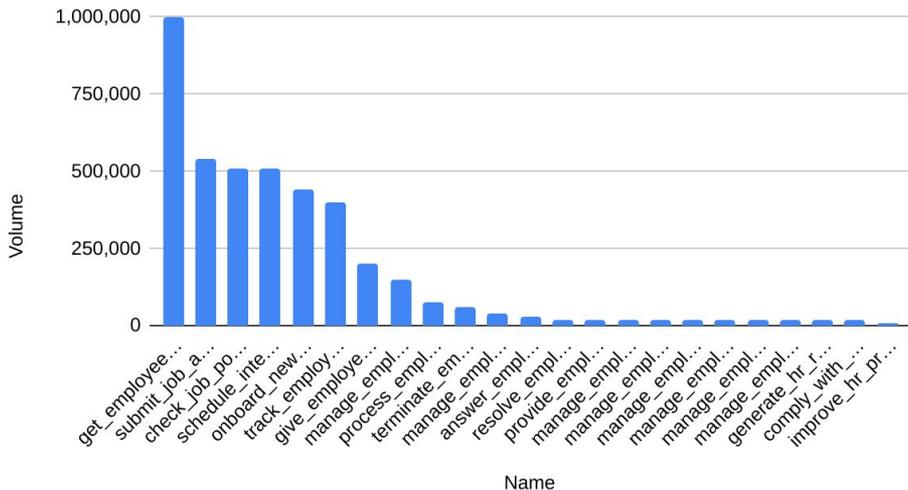


# Four Box Model (4BM) after LLM



# Example Use Cases - ABCUT Results

Functional Volume



## Examples:

- PTO balance - GenAI not needed
- PTO request & approval - Potential GenAI
- Time keeping - GenAI not needed
- Open Enrollment FAQs - Informational
- Open Enrollment - Transactional
- Process I9 (API will be ready in 6 months)
- Performance Metrics (widgets created)
- HR FAQs (from handbook) - Informational
- Proactive onboarding messaging
- Recruitment SMS
- Sales/Design Quotes - GenAI

# Wrap-up

It's about getting the right information, to the right person, in the right way, at the right time.

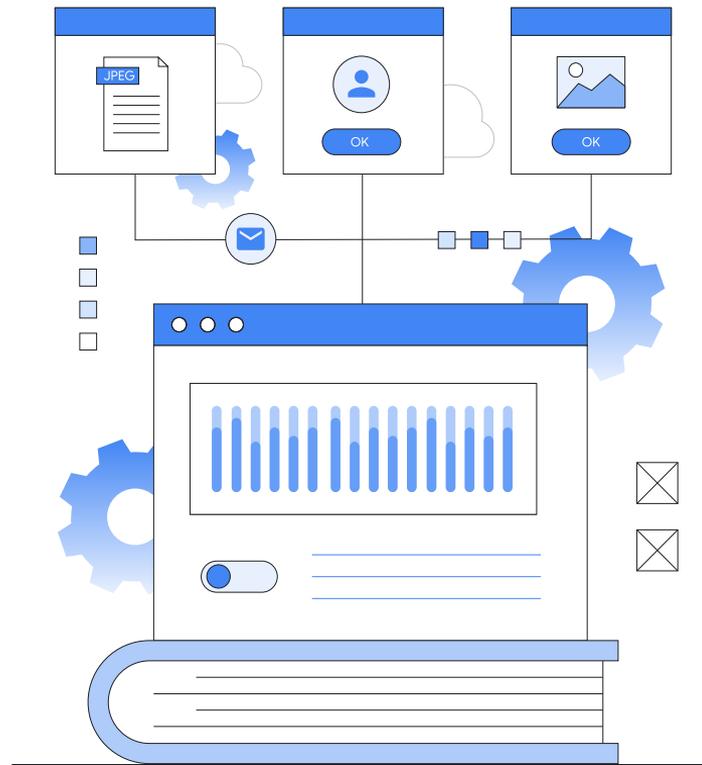
Enterprise is not a greenfield

Check your inventory

Do the math! Volume != Potential Impact

4 Box Model to prioritize

How GenAI can help



Thank you!

