



Fabrizio Ciacchi

Your e-commerce bot

Voice, Bots & IoT



code.talks
commerce

GARY VEE - Entrepreneur



<https://youtu.be/EYoRjPpdigM>

.... We will be educated about the travel destination, during the course of the dinner, and at the end we will say 'Alexa, book it!'

I'm Fabrizio Ciacchi



- Engineer Team Lead at Spryker
- I worked for Rocket Internet and Vodafone Italy

This talk is about trying to solve a puzzle.



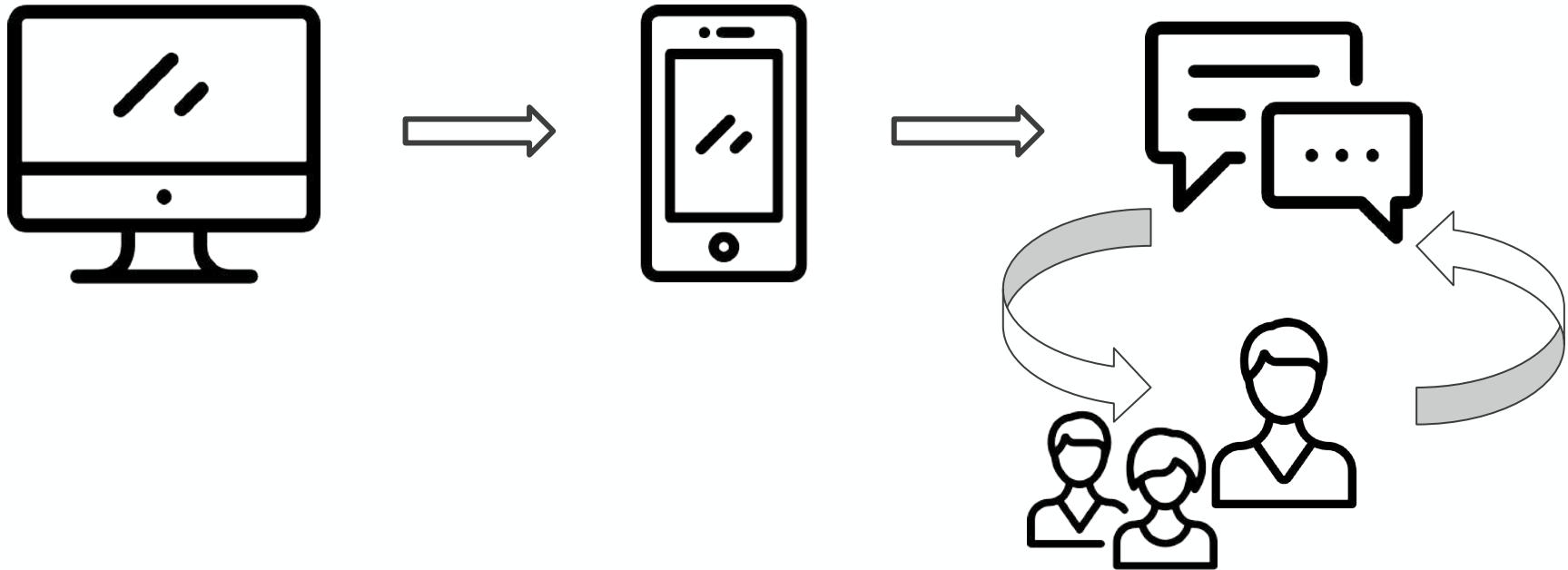
The role of a bot



What is a bot?



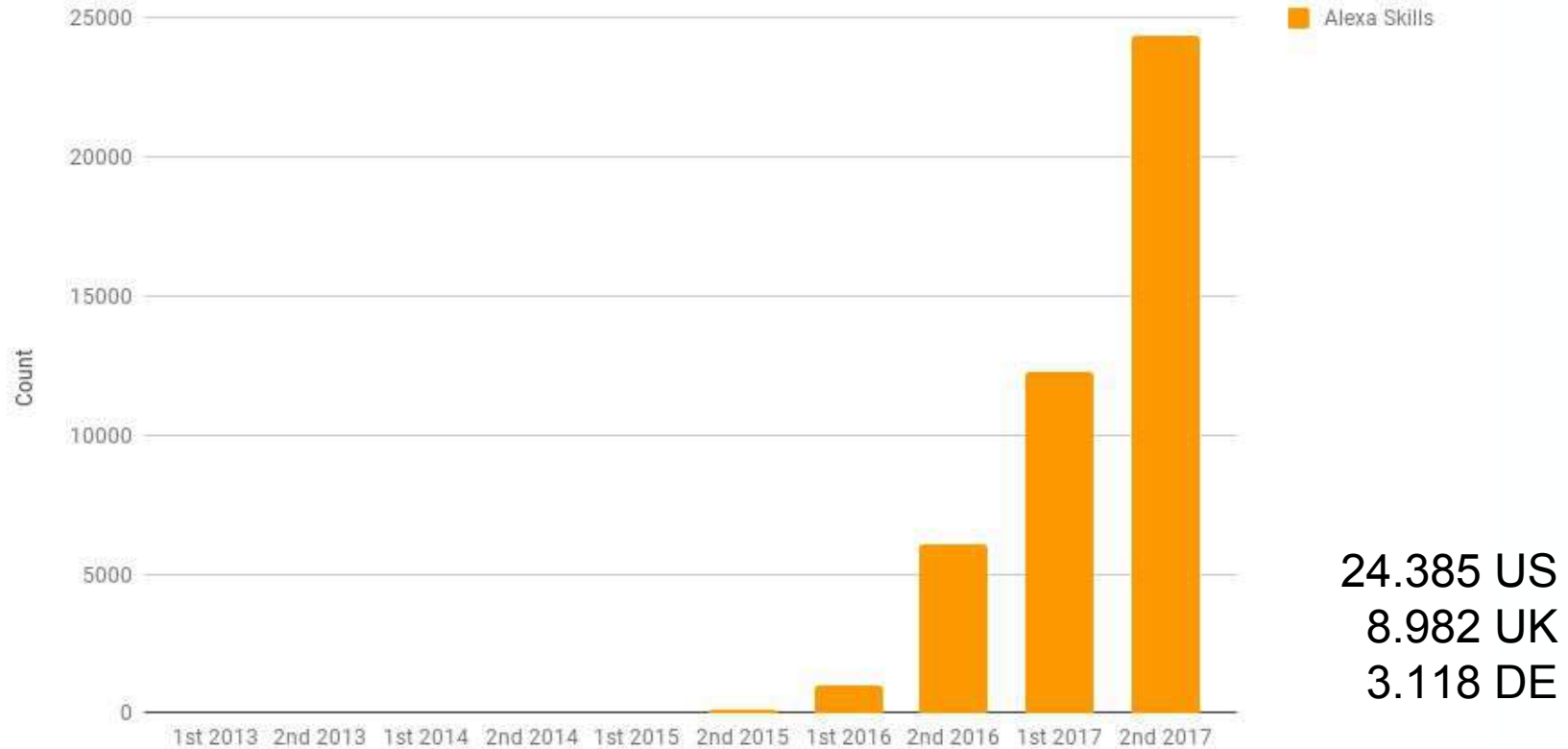
“A **(chat)bot** is a computer program which conducts a conversation via auditory or textual methods.” (via [Wikipedia](#))



Web, Mobile and Bots



Alexa Skills



Data source: Techcrunch.com, Voicebot.ai, Statista.com

Mapping Web/Bot



- In an e-commerce, we already 'solved' the mapping needed to have a functional bot.

Bot

Conversational Search

Products detail

One click buy

After-sale action

Customer Care

Web

Fulltext Search

Product Detail Page

Cart/Checkout

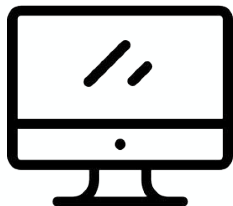
Shipment Info & Returns

CRM + Email + Phone

Evolution



- All we can reduce this to, is Evolution...



Search - 50 results

Response - 2 sec

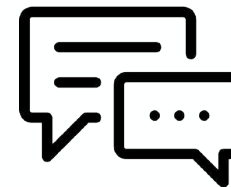
Checkout - 4/5 steps



10 results

300-500 msec

1-2 steps



3 results

100 msec

1 click

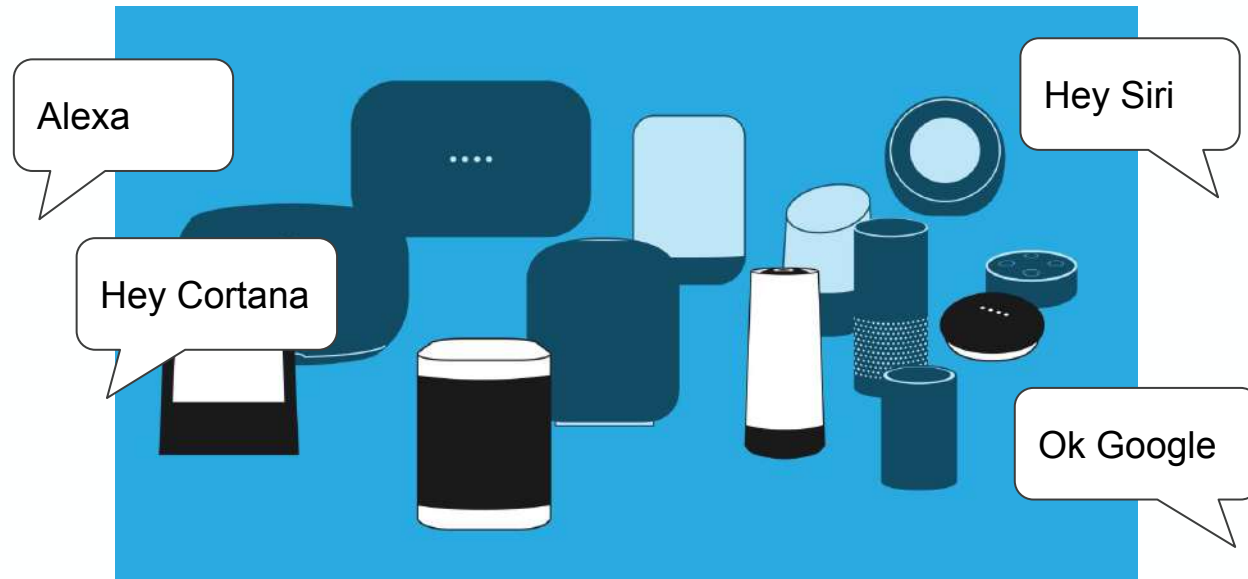
It's the next Far West



“Alexa, add soap to my shopping cart”



“I would like to see who sells shoes nearby”



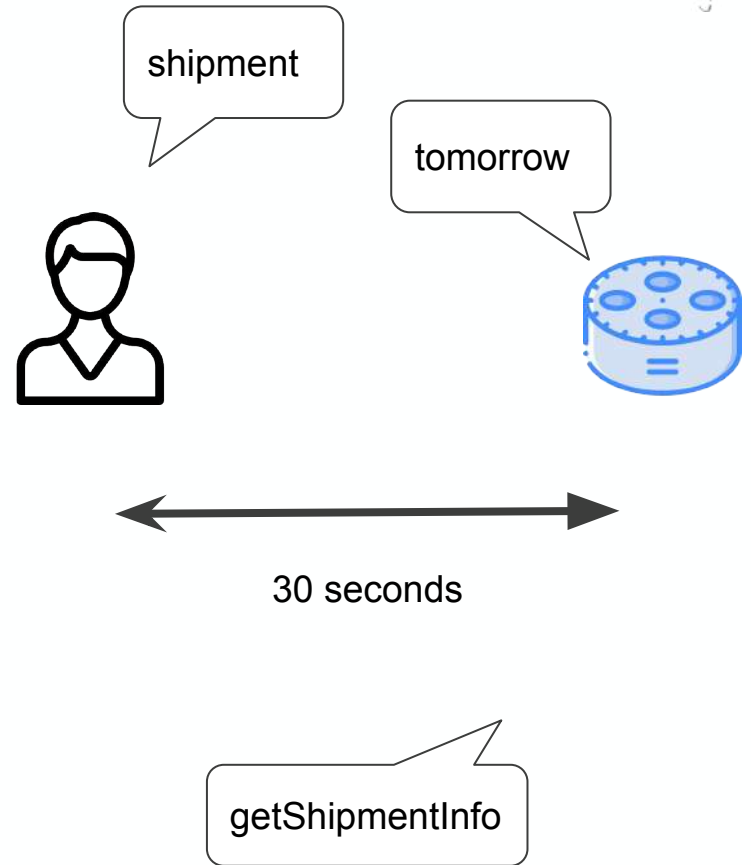


Chat vs Voice



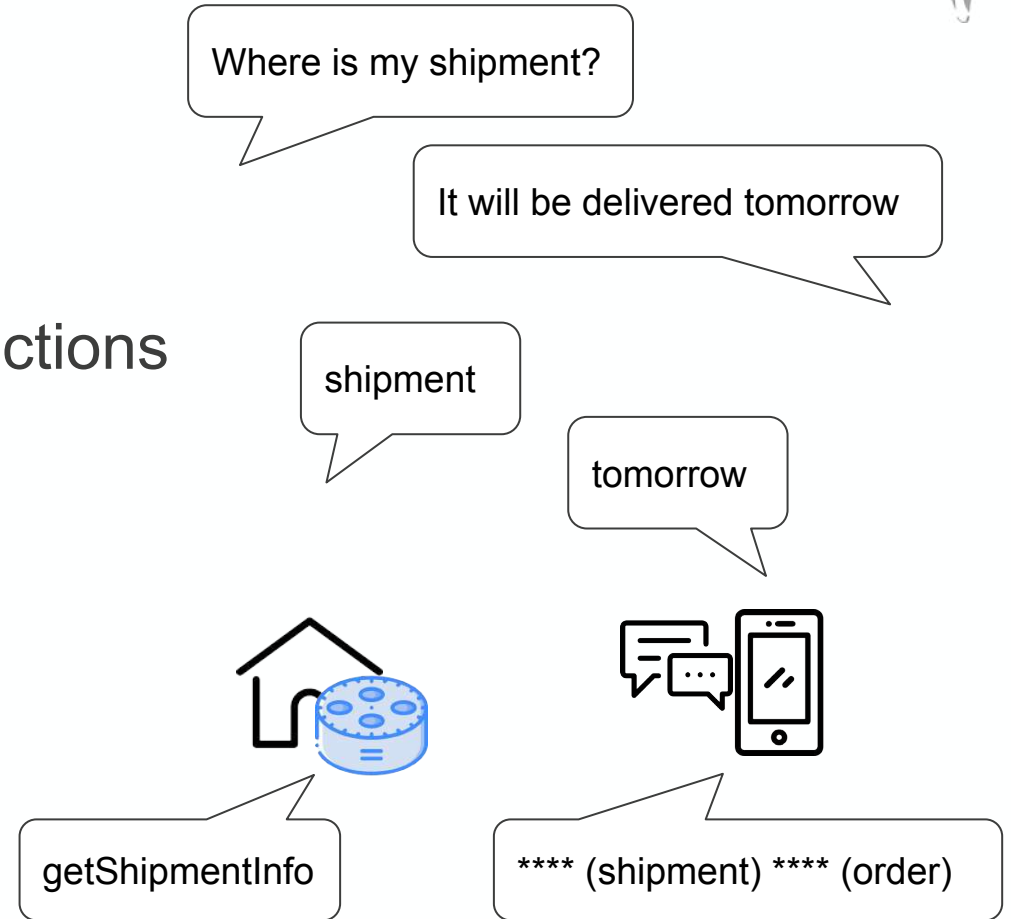
Similarities

- Convey small information
- Users want to ask for info
- Time interaction is short
- Narrow down to intent/response



Differences

- Voice better for informative skills
- Voice has longer message/interactions
- Use cases are different
- Different technologies

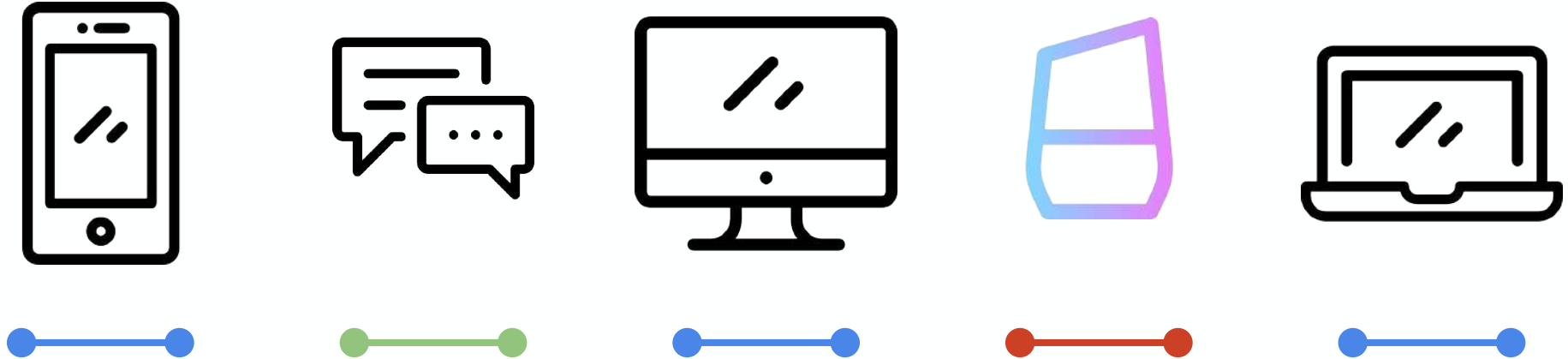




Use Cases



User Journey



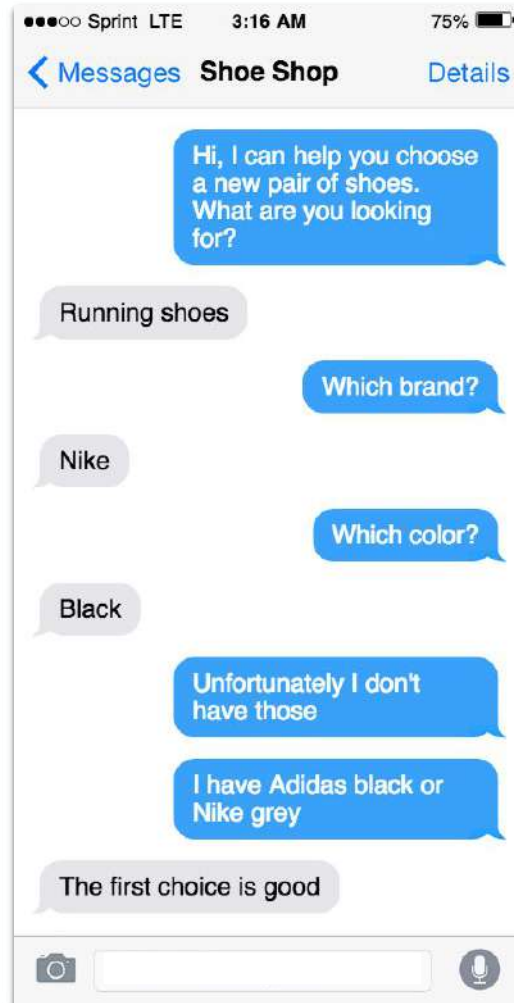
User Journey

- Try to fill the gaps of how much the user interacts with your business
- That would create a more efficient and engaging communication
- Think it overtime, 1 week, 1 month. That might increase the time of engagement for your user.

Example:

- In our example, the user wants a perfume for his wife, but it's out of stock
- With chat-bots notifications, he can order it meanwhile commuting instead of doing it at work (and forgetting)
- The same for the an home device with voice skills. Once the user is back home, can ask Alexa 'what is the status of my shipment?'
- Other channels (Web, Mobile, Smartwatch, iPad) are still supportive of your business

Use Case 1: Shoe Shop

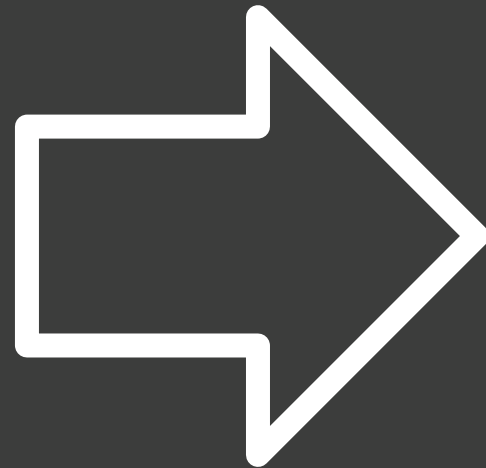


Use Case 2: Customer Care

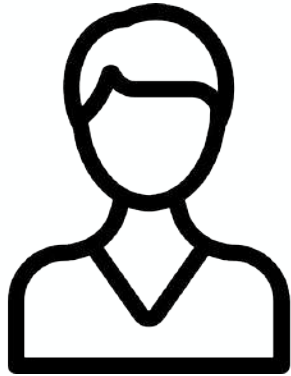




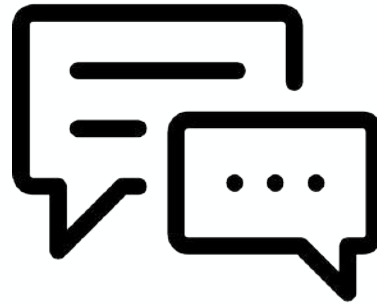
How do I start?



How do I start?



Use Case

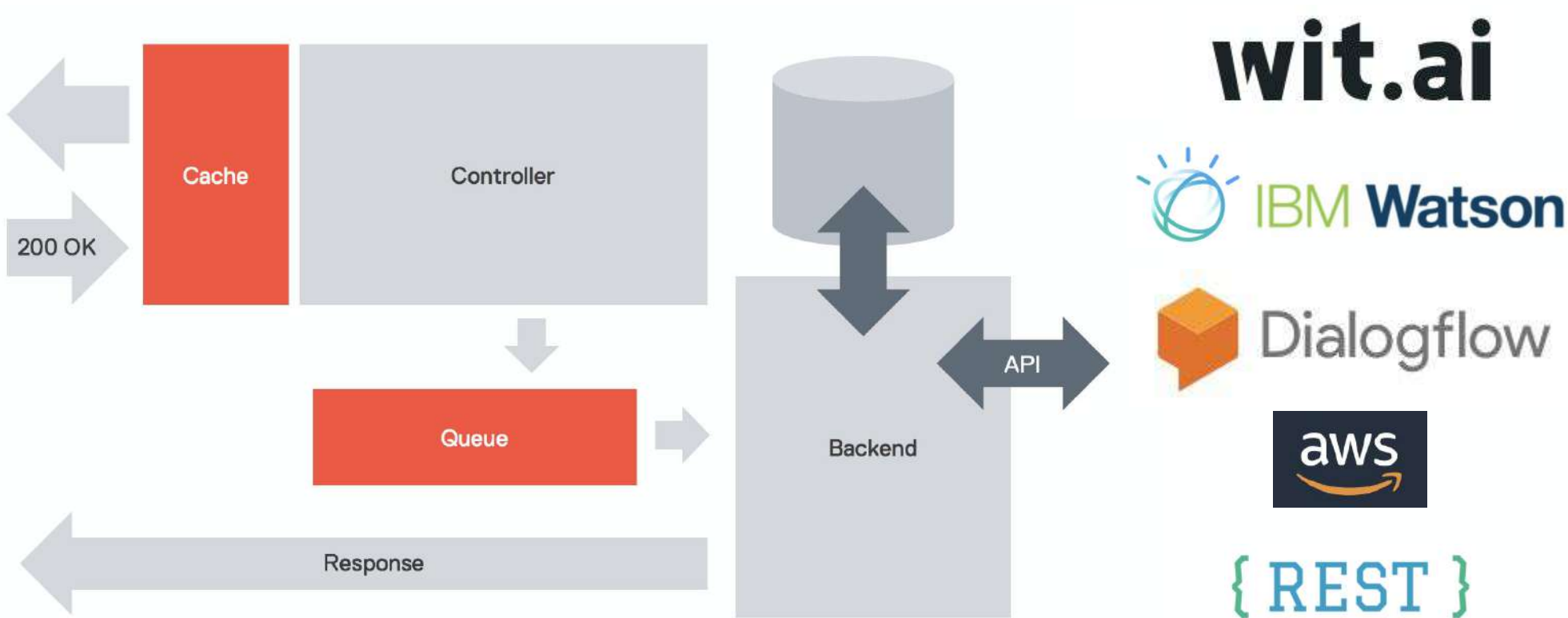


Branding



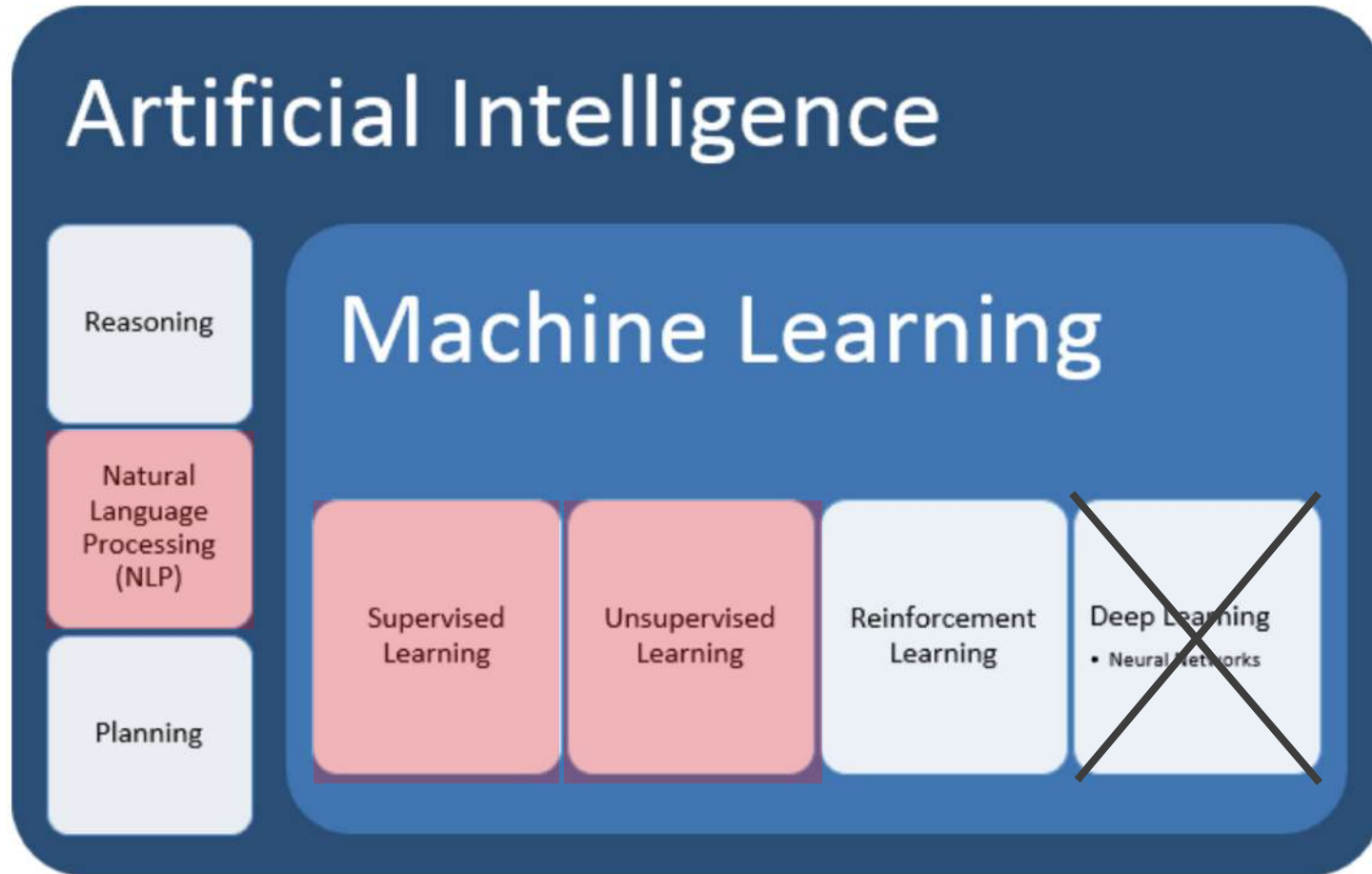
Tone

Backend Design



Build a Facebook Bot: <https://blog.spryker.com/how-to-build-bot-5-steps>
API Design: <https://www.slideshare.net/ciacchi/rest-api-a-real-case-scenario>

Machine Learning



Machine Learning For Dummies, IBM Limited Edition

Building an Alexa skill



Intents / select_concrete

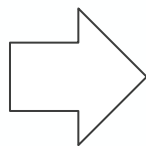
Sample Utterances (3) ?

What might a user say to invoke this intent?

I want {food} {variant}

I want {food} with {variant}

I want {variant} {food}



Skillinator.io

Interaction Model JSON

```
{
  "dialog": {
    "intents": [
      {
        "name": "select_concrete",
        "confirmationRequired": false,
        "prompts": [],
        "slots": [
          {
            "name": "food",
            "type": "slot_food",
            "confirmationRequired": false,
            "elicitationRequired": false,
            "prompts": []
          },
          {
            "name": "variant",
            "type": "slot_variant",
            "confirmationRequired": true,
            "elicitation": "Elicit.Intent-select_concrete.IntentSlot-variant"
          }
        ]
      }
    ]
  }
}
```

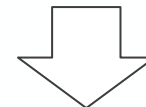
Lambda Template

```
'select_concrete': function () {
  // delegate to Alexa to collect all the required slot values
  let filledSlots = delegateSlotCollection(this);
  speechOutput = "";
  // any intent slot variables are listed here for convenience

  let foodSlotRaw = this.event.request.intent.slots.food.value;
  console.log(foodSlotRaw);
  let foodSlot = resolveCanonical(this.event.request.intent.slots.food);
  console.log(foodSlot);
  let variantSlotRaw = this.event.request.intent.slots.variant.value;
  console.log(variantSlotRaw);
  let variantSlot = resolveCanonical(this.event.request.intent.slots.variant);
  console.log(variantSlot);

  // Your custom intent handling goes here
  speechOutput = "This is a place holder response for the intent name";
  this.emit('ask', speechOutput, speechOutput);
};
'Unhandled': function () {
  speechOutput = "The skill didn't quite understand what you wanted. Do y
```

Generate



```
public function checkoutAndOrderAction(Request $request)
{
    $response = "Sorry, it was impossible to complete the order. Could you try again?";

    $isSuccess = $this->getClient()->checkoutAndPlaceOrder();

    if ($isSuccess) {
        $response = $isSuccess;
    }

    return new JsonResponse(
        [
            'response' => $response,
        ],
        status: 200
    );
}
```



```
'select_concrete': function () {
    speechOutput = "";
    let self = this;

    let foodSlotRaw = this.event.request.intent.slots.food.value;
    console.log(foodSlotRaw);
    let foodSlot = resolveCanonical(this.event.request.intent.slots.food);
    console.log(foodSlot);

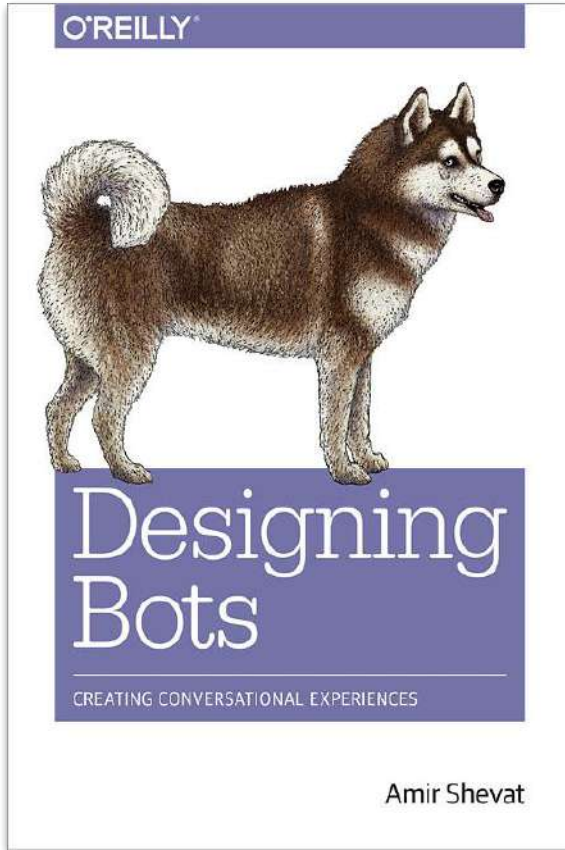
    let variantSlotRaw = this.event.request.intent.slots.variant.value;
    console.log(variantSlotRaw);
    let variantSlot = resolveCanonical(this.event.request.intent.slots.variant);
    console.log(variantSlot);

    // Request options
    const options = {
        hostname: globalHostname,
        port: 80,
        path: '/alexa/cart?variant=' + variantSlot,
        headers: {
            'Accept-Encoding': 'gzip, deflate'
        }
    };
};
```

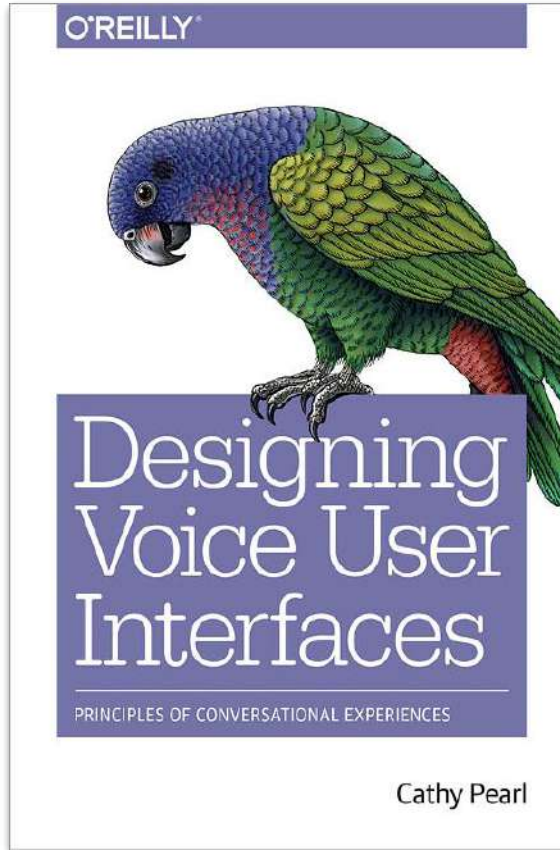
A simple Alexa skill dialog



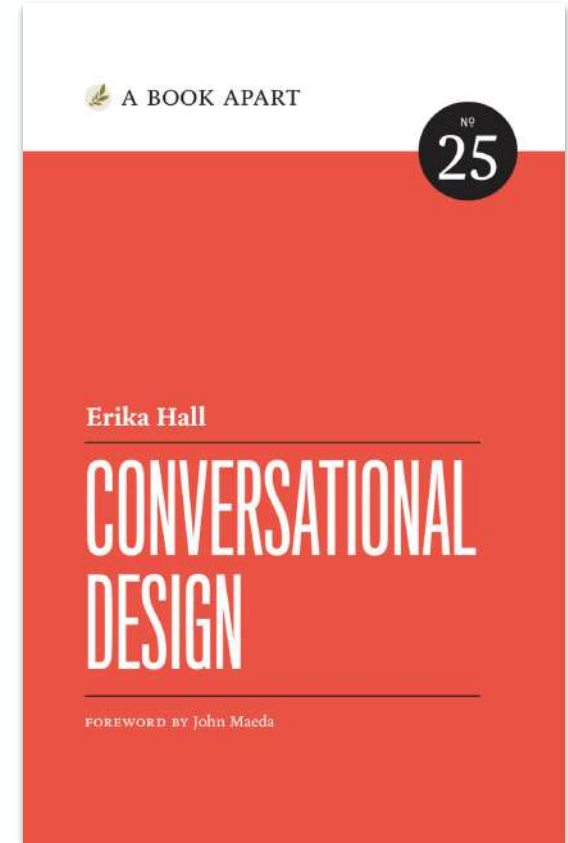
Books



– <https://oreil.ly/2pDdHYH>



<https://oreil.ly/2G9ZR7d>



<http://bit.ly/2G7Ggo4>

Puzzle solved





Spryker

Your e-commerce bot

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<http://bit.ly/code-talks-2018>

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QUESTIONS?