Azure Bot Service

Overview

Microsoft

Explosive growth

10,000,000+ messages/day

1,000,000+ unique users/day

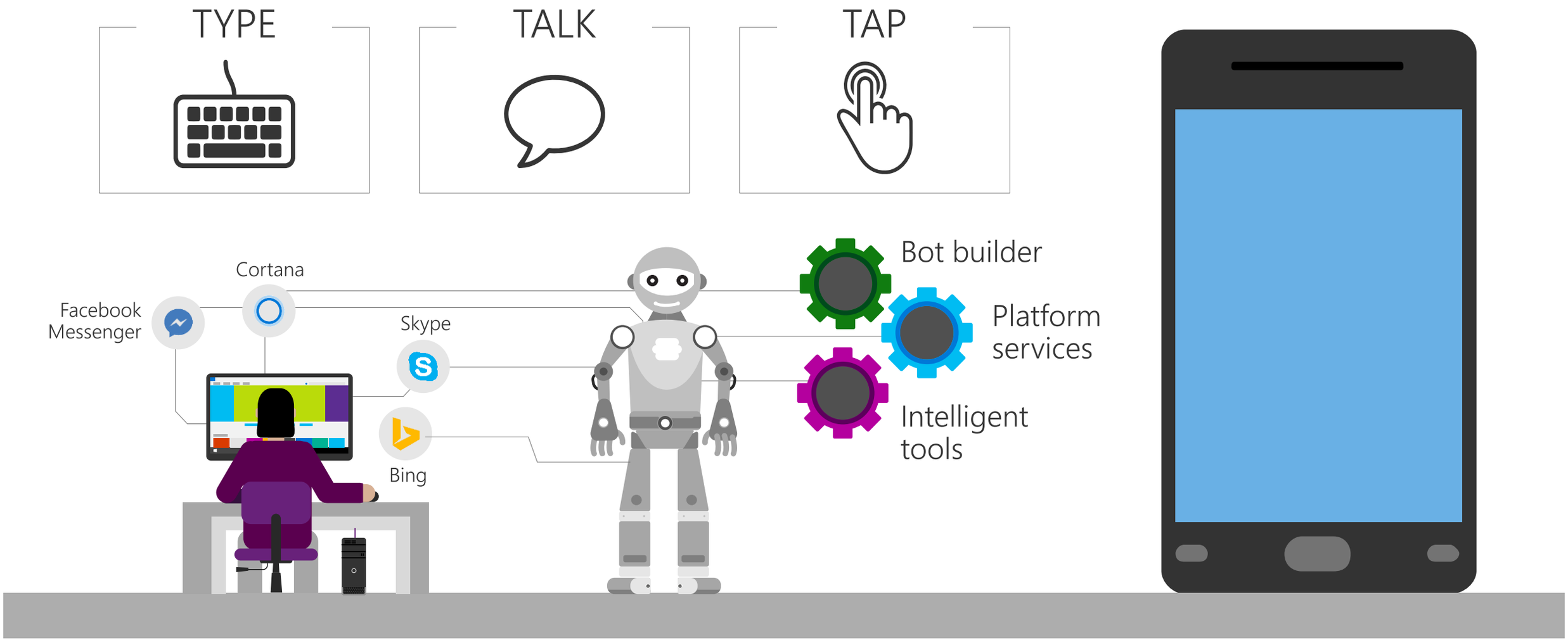
100,000+ developers

10,000+ active bots

1,000+ companies

100+ new features today

Why a bot?


TYPE
TALK
TAP
Cortana
Facebook Messenger
Skype
Bing
Bot builder
Platform services
Intelligent tools

Kinds of bots

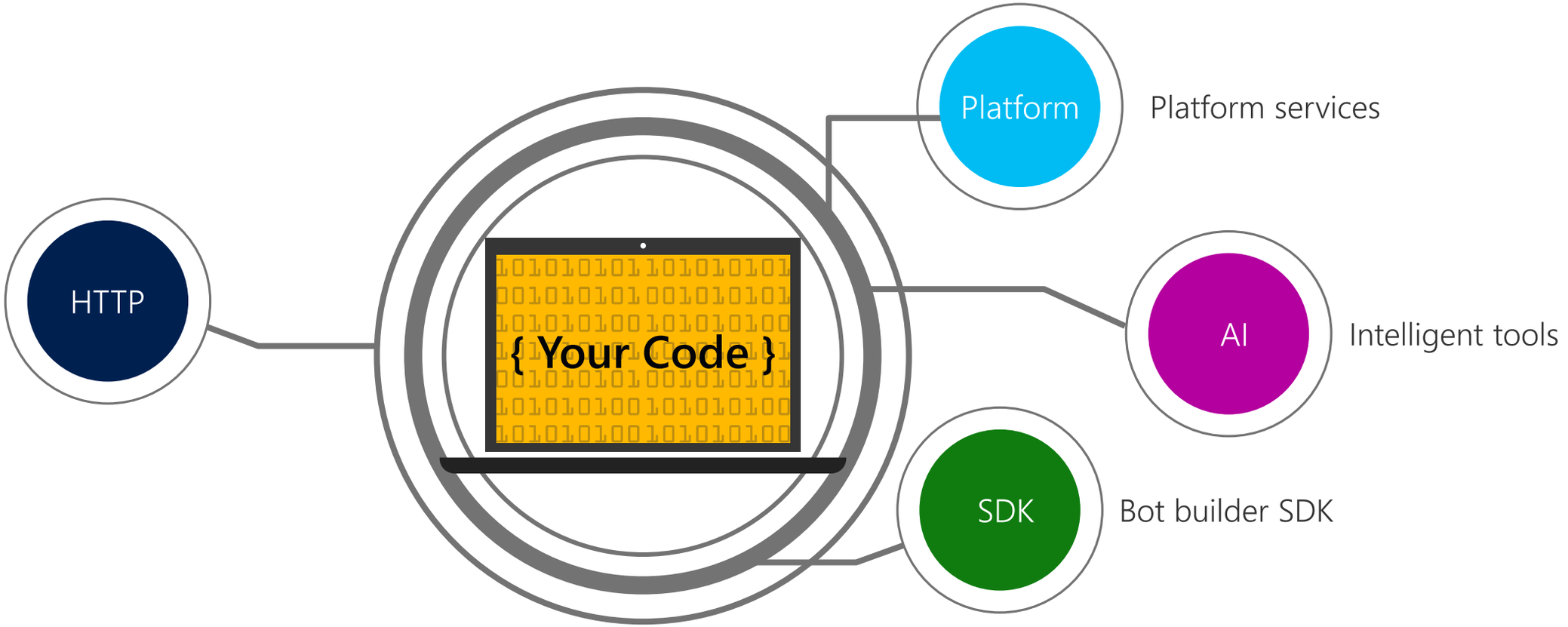
1,000+ companies engaging us

Scenario	Retail	Finance	Insurance	Telecoms	Government	Automotive	Manufacturing	Healthcare	Media	Events
Customer service	✓	✓	✓	✓	✓	✓	✓	✓		✓
Customer retail	✓	✓	✓	✓				✓		
Audio/speech analysis	✓	✓	✓	✓	✓				✓	
Translation		✓	✓							
Surveillance		✓			✓					
Knowledge extraction		✓	✓	✓			✓			
Video/photo analysis		✓			✓				✓	
Product identification	✓						✓	✓		
Digital assistant						✓				
Footfall analysis	✓									✓
HD maps and object detection						✓				

Demo

Bots running in Bing Search results
Video Link

What is a bot?



REST endpoint
Direct Line Protocol

Conversational and business logic

Canvas aware

Context sensitive

What is the bot framework?

What?

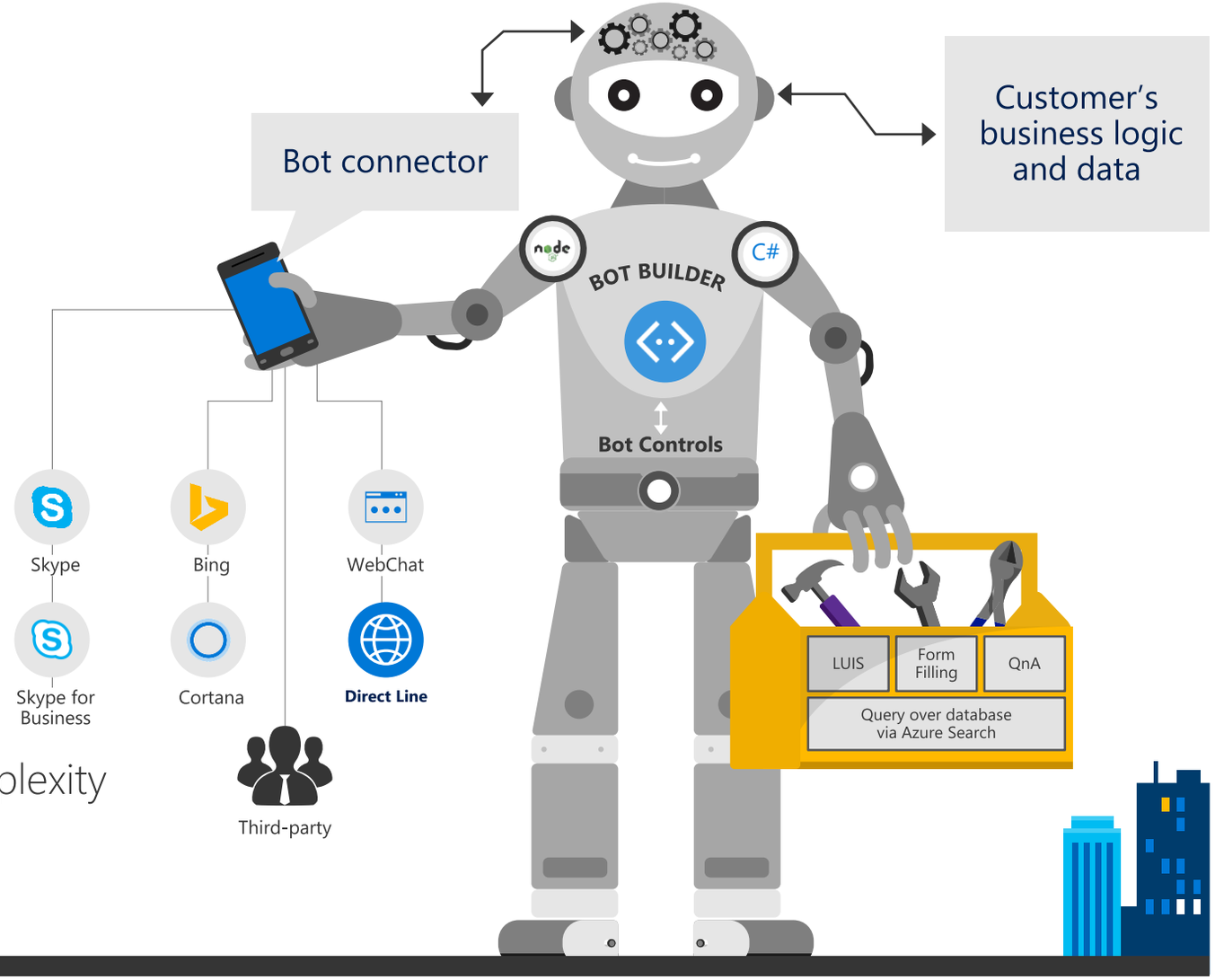
- Tools for building REST websites
- Services to enrich
- Mechanisms for receive events
- Data to debug and tools to analyze

Why?

- Implements standard protocols
- Modeling conversations is hard; tools help!
- UI across multiple canvases is hard; cards rock!
- Language understanding is hard
- Common and well understood patterns

Goals

- Start simple; add complexity; no dead-ends
- Bot adapts to the user, based on context
- Composable and intelligent controls to manage complexity



Highlights

I M P R O V E M E N T S E V E R Y W H E R E !

Bot builder

- SDK updates
  - Speech support
  - Improved dialog tools
  - Debugging improvements
  - Channel inspector
- Improved tooling

Platform

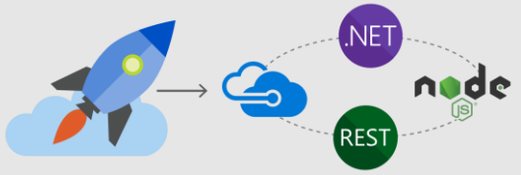
- New channels
  - Cortana
  - Bing
  - Skype for Business
- Adaptive cards
- Speech support
- Payments

Intelligence

- Analytics
- Bot controls
- Speech support
- Cognitive services

New docs!

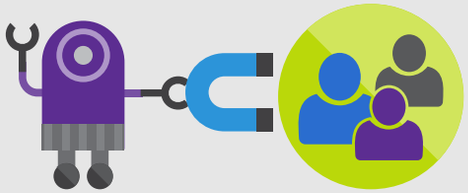
#1 REQUESTED FEATURE



Comprehensive

Scenario-based

Well organized
and discoverable



Bot design

Patterns and practices

Samples

Searchable

Integrated with APIs

Easy to read

Demo

New documentation

New channels

I M P R O V E M E N T S E V E R Y W H E R E !

New channels

ONE BOT
MULTIPLE CANVASES

Custom skills

Memory/profile

Speech

Business bots

Top bots

Bots in Bing search

LOB bots

IT managed

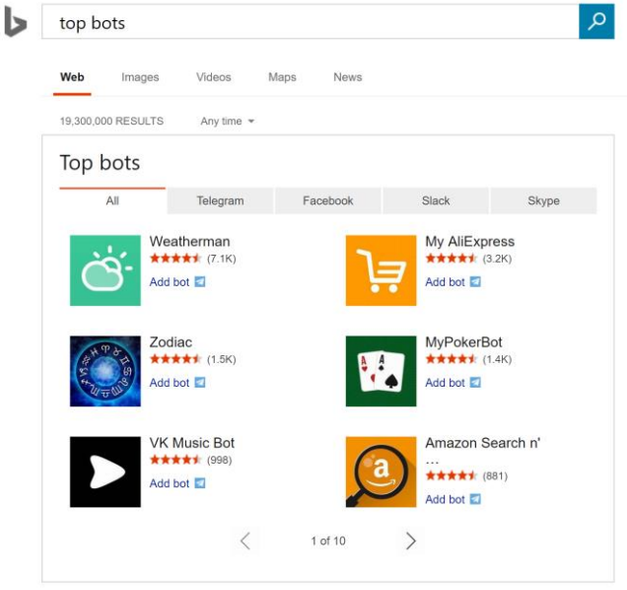
Integrated auth

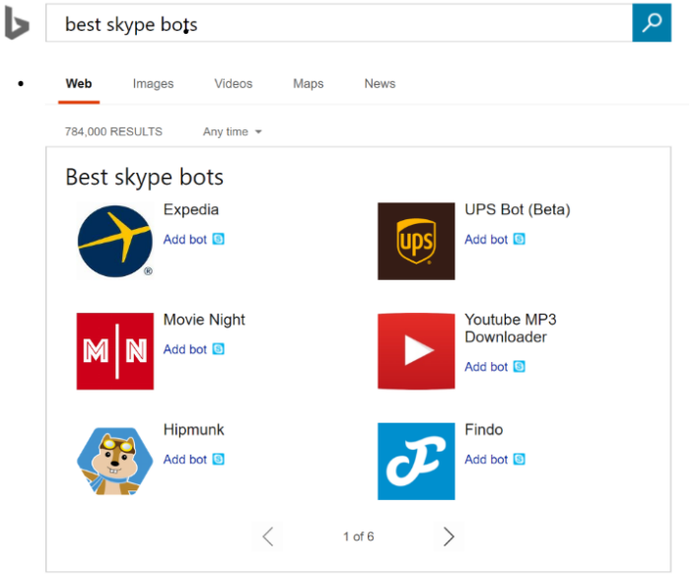
Bot discovery

B I N G S E A R C H F O R B O T S

Bing Search Terms

- Top bots
- Top Skype bots
- Famous Skype bots
- Best Facebook bots
- Latest Slack bots



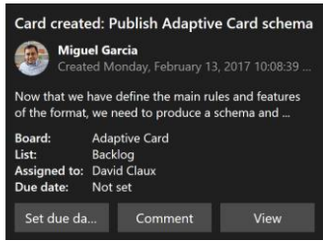


Demo

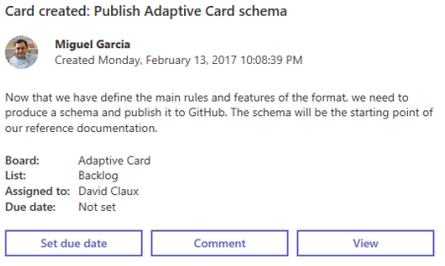
Adaptive cards
One card, multiple canvases

Adaptive cards

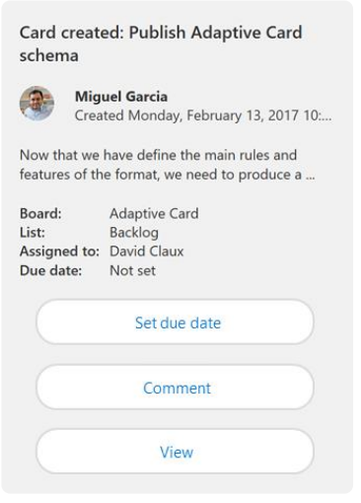
OPEN FRAMEWORK
MULTIPLE CANVASES



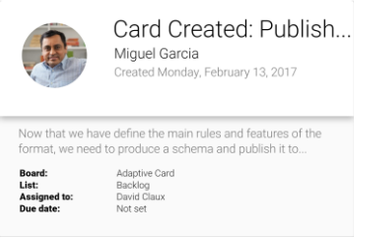
Notification



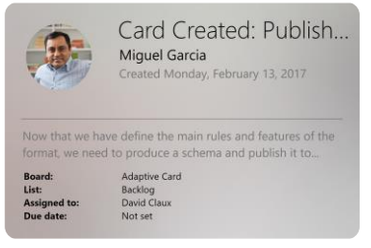
Microsoft Teams



Skype



Android



iOS

Payments

Works across most major platforms

Fast and simple payment experience

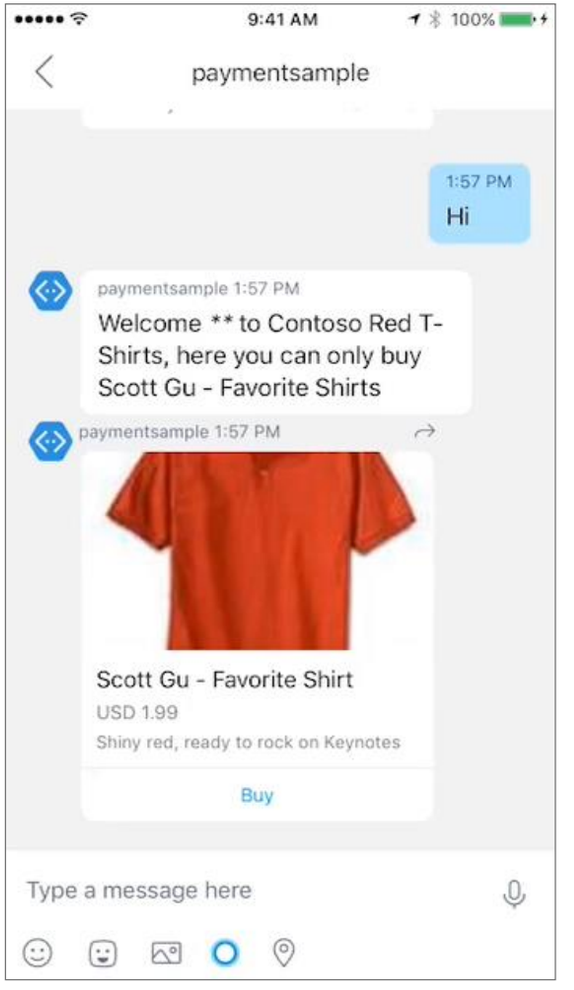
Bring commerce capabilities to your bot

Stripe is currently supported

Visit Microsoft seller center

Obtain merchant ID

Start building



Learn more on Microsoft Seller Center!

Read the integration guide for the bot framework

Speech

DEEP INTEGRATION
ACROSS THE BOT FRAMEWORK

SPEECH IN PROTOCOLS

DirectLine support

WebChat control

Cortana

SPEECH IN SDKS

SSML

Speech friendly prompts

Conversation management

SPEECH IN LUIS

Modeled conversations

Common model (Cortana, Bing speech, custom speech recognition)

LUIS

L A N G U A G E U N D E R S T A N D I N G

Top requested features

- Production staging and versioning
- More languages (Dutch, Korean, dialects)
- Increased intent and entity limits
- 25 customizable prebuilt domains

More new features

- Lists
- Improved recognizers(*)
- Semantic dictionaries
- Spell checking

(*) Recognizers are open-sourced

LUIS

L A N G U A G E U N D E R S T A N D I N G

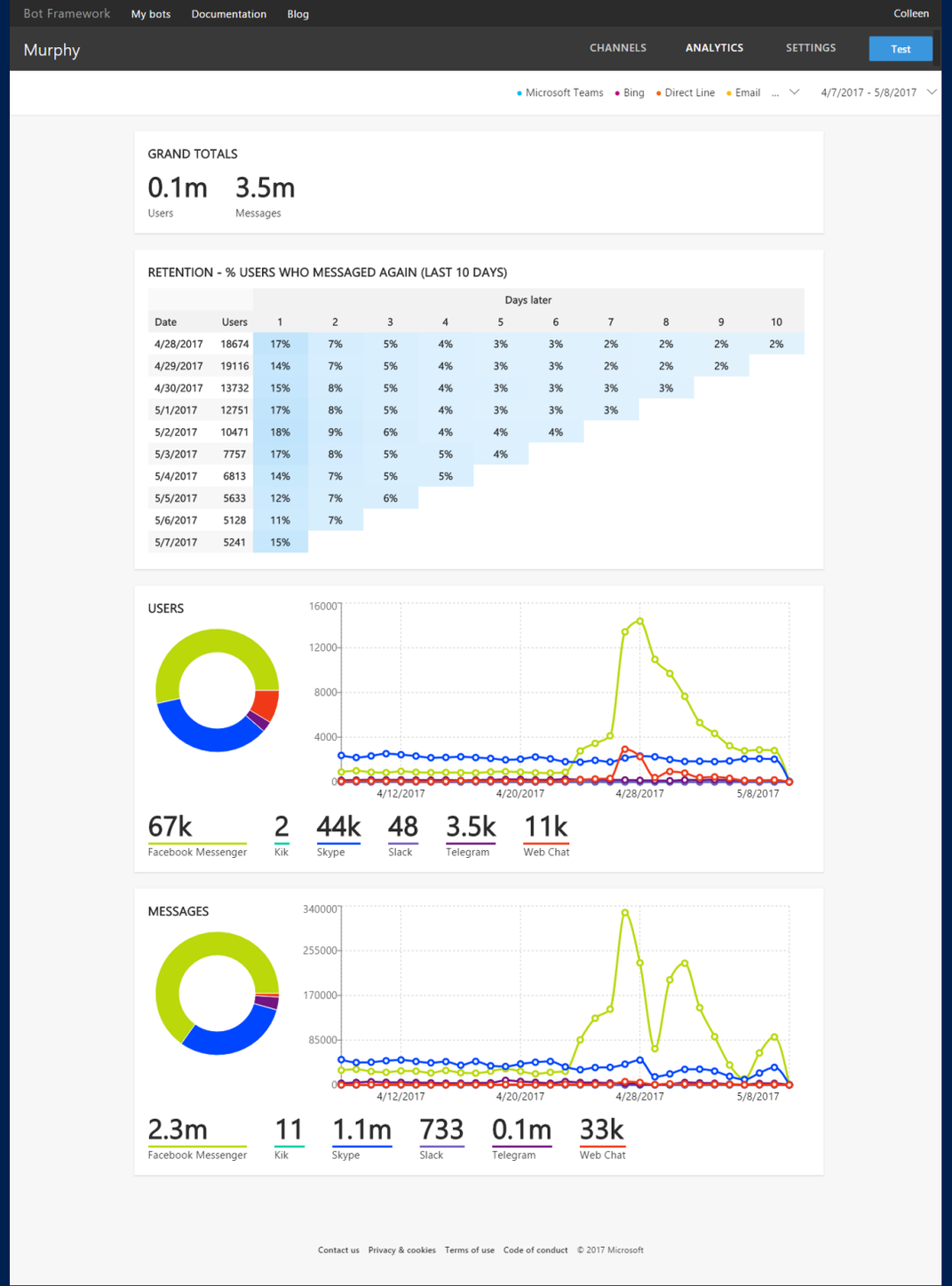
Pre-built domains

- Predefined packages
- Bootstrap model creation
- Customizable!

Examples of pre-built domains

- Sports
- Weather
- Stock
- Contacts
- Calendar
- Restaurants
- Entertainment
- Fitness
- Home automation
- Music
- Translation
- Movie tickets

Bot analytics



Demo

LUIS lists and auto recommendations

Azure bot service v.Next

S N E A K P E E K

“One stop shop for building bots”

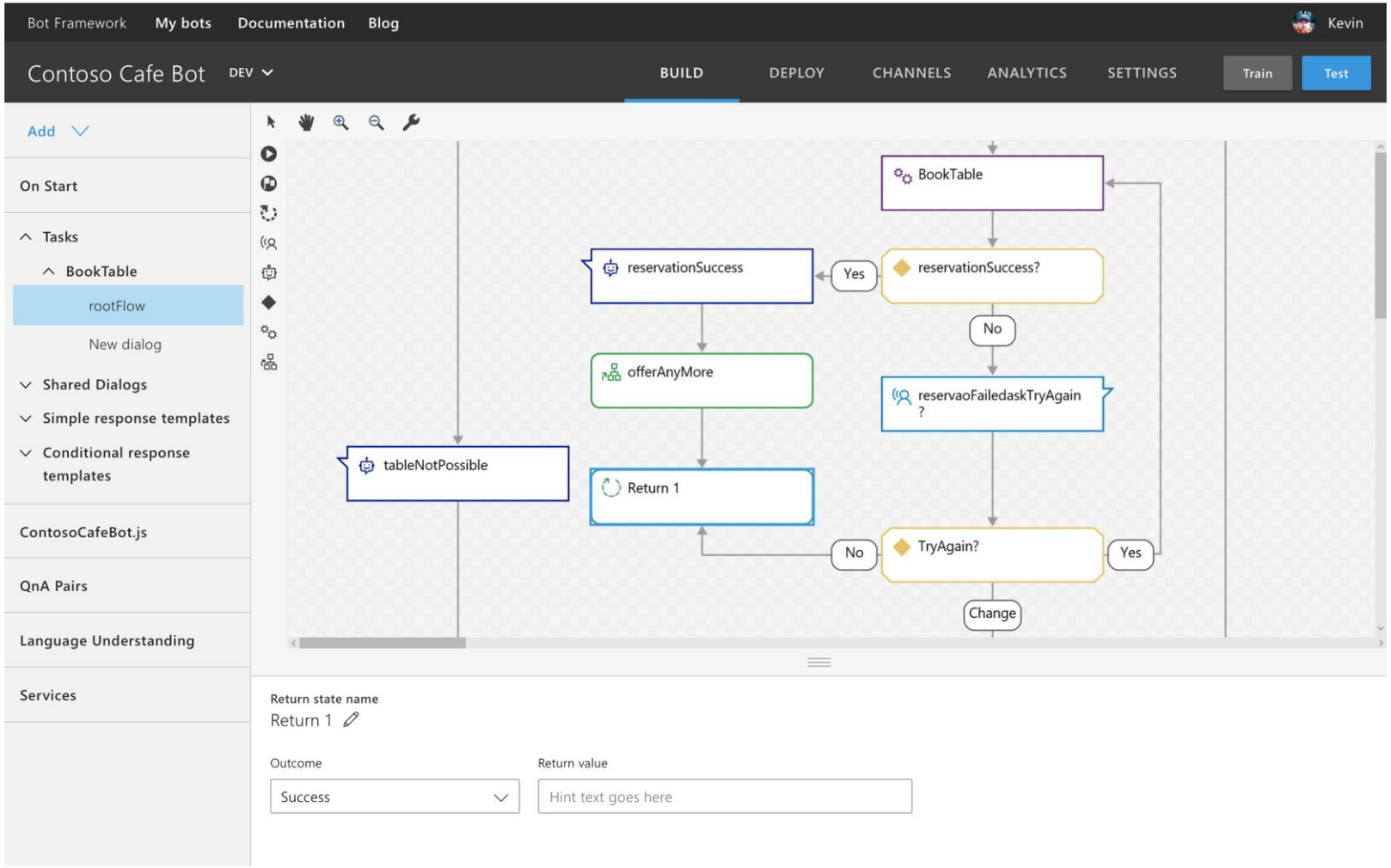
- Fully Azure integrated
- Conversational vs. business logic
- Richly tooled
- Design; code; deploy; manage; analyze

Highlights

- Data stays in a user’s subscription
- Improved perf via colocation
  - Bot + functions + LUIS runtime
- SDK unification
- Componentization and reuse

Azure bot service v.Next

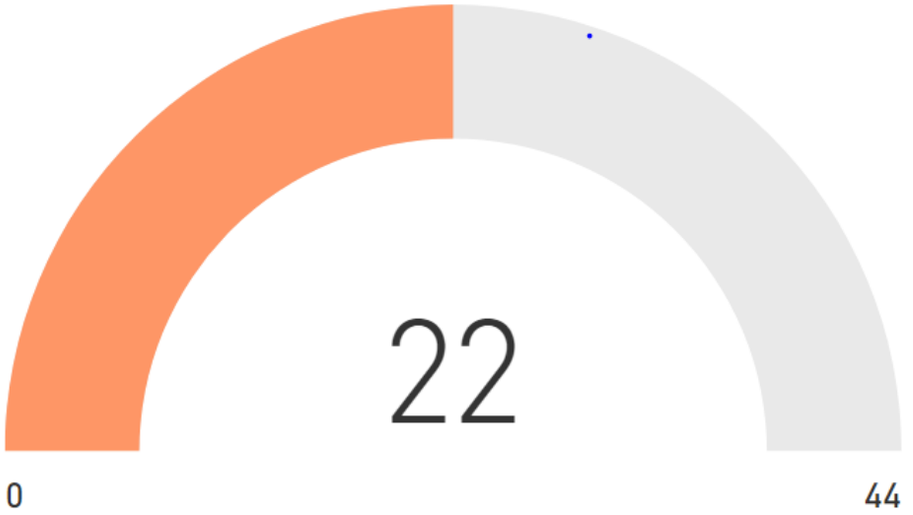
Conversation designer



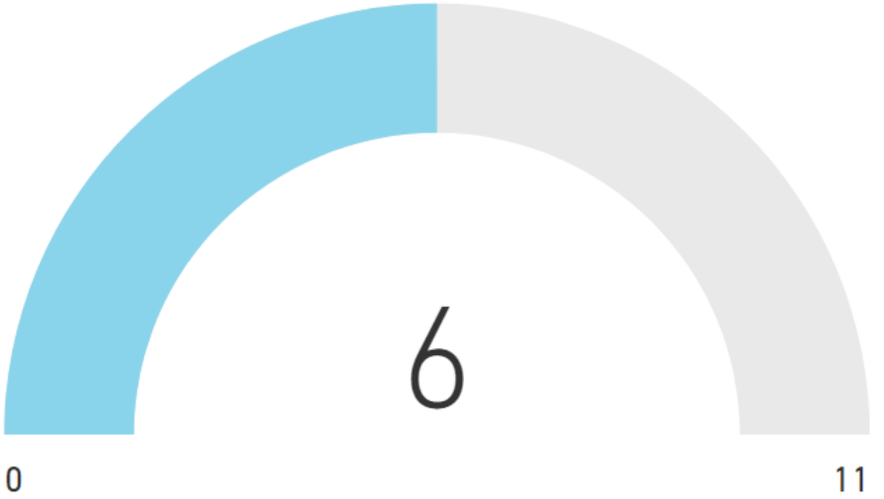
Community engagement

Support metrics, stack overflow

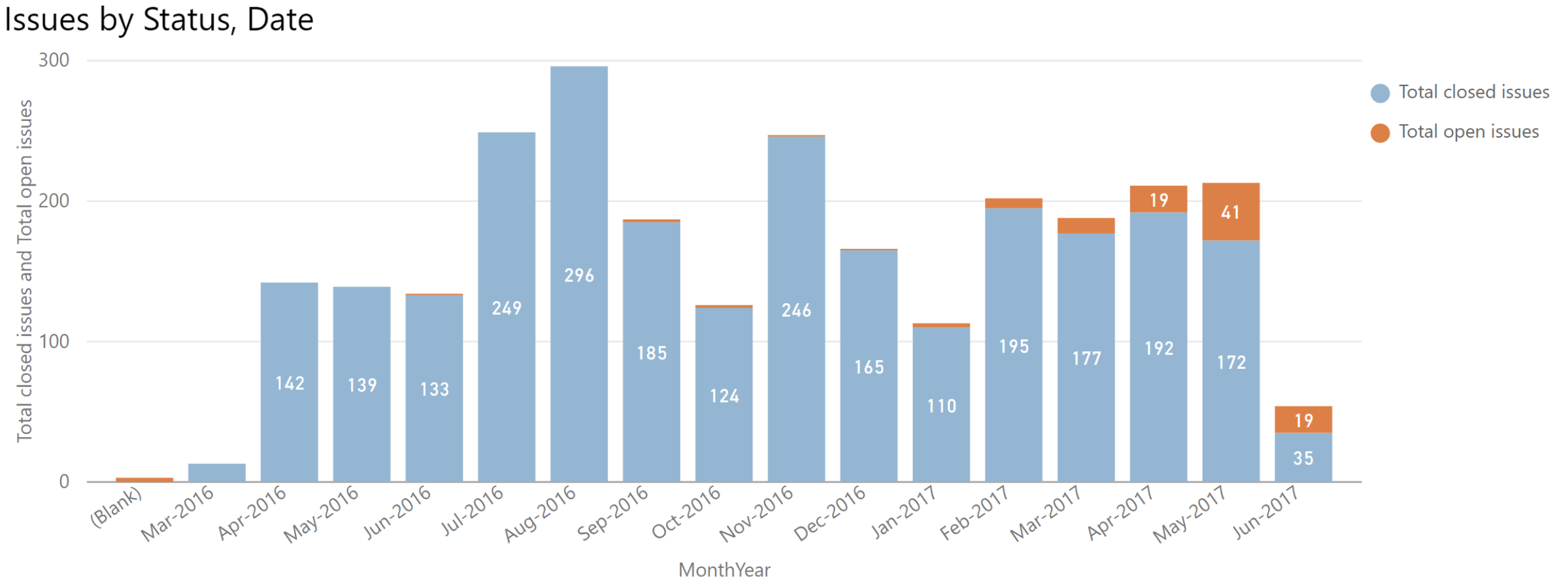
May



June

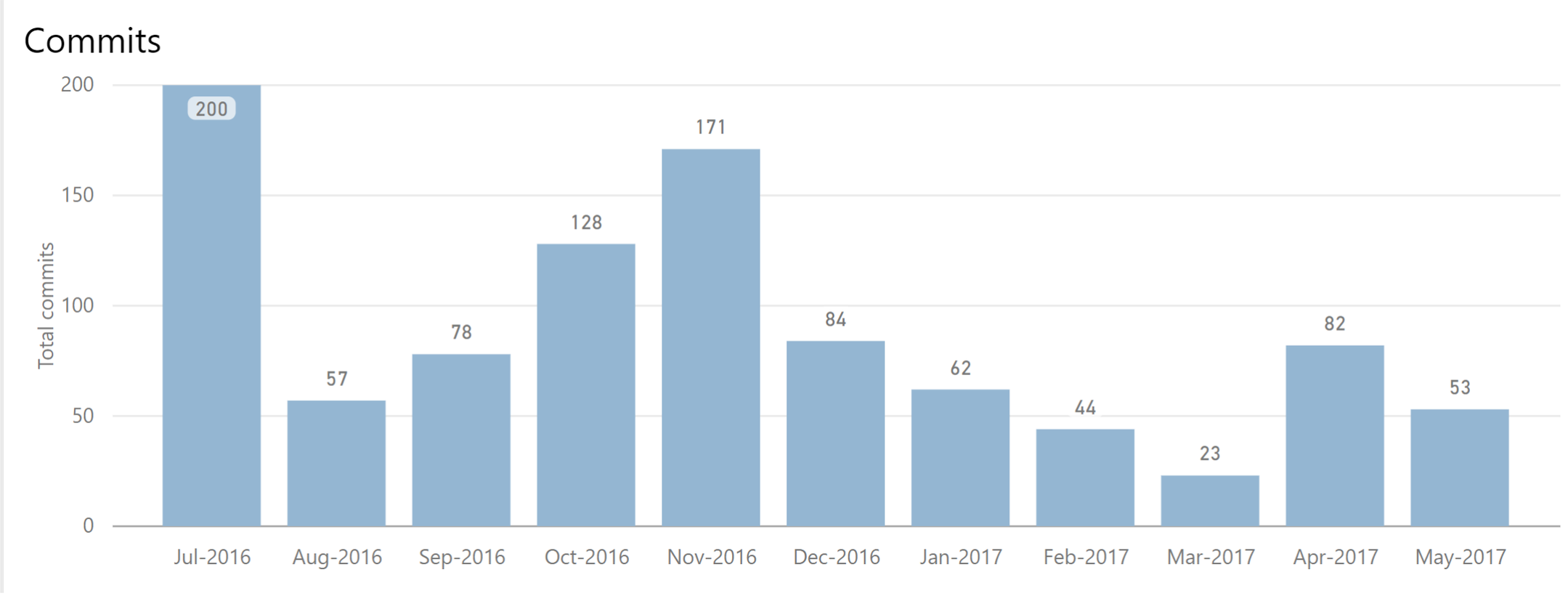


Support metrics, GitHub



GitHub contributions

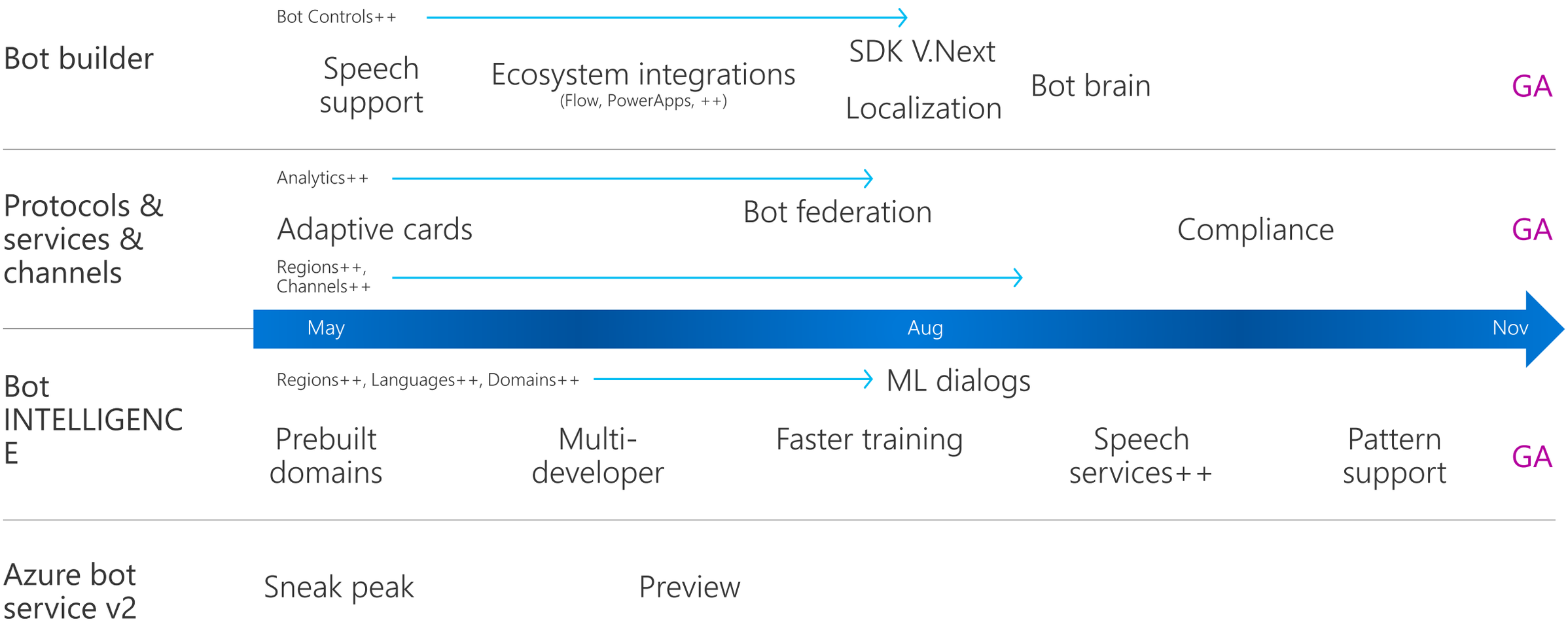
Vibrant community!



Call to action

- Build bots—https://dev.botframework.com/
- Docs—https://docs.microsoft.com/en-us/bot-framework/
- GitHub—https://github.com/Microsoft/BotBuilder
- Continue your education at Microsoft Virtual Academy online

Bot framework roadmap 2017



Questions?

Contact

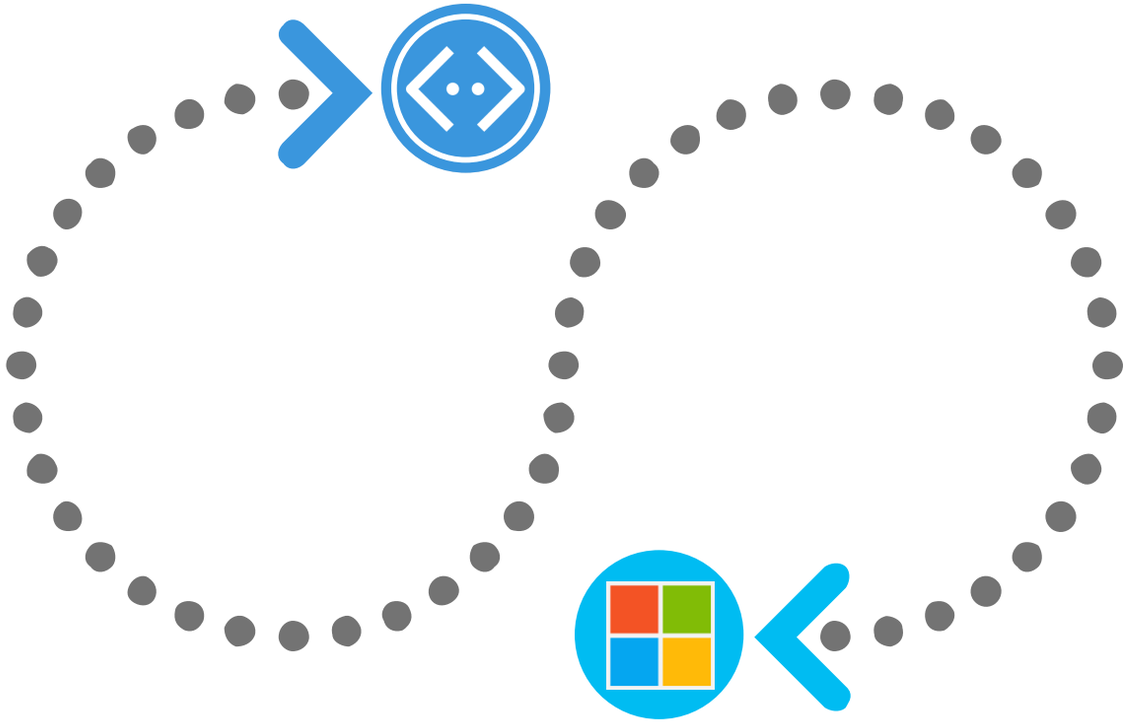
What is the bot framework?

Build and connect intelligent bots

The bot framework provides tools and resources for designing, building, deploying, and managing bots

Network of Microsoft customers

Bots connect to Microsoft properties, such as Cortana, LinkedIn, Skype, and Office 365



Bot example

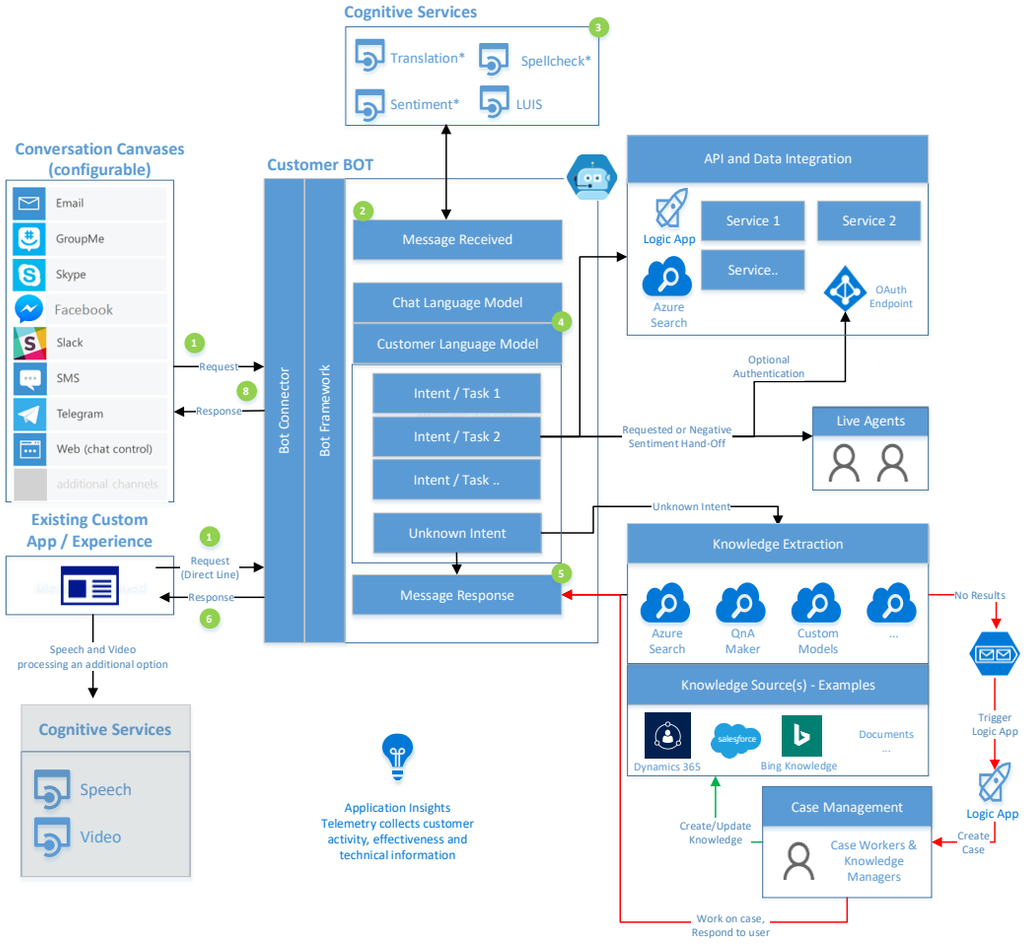
Azure Services integration via SMSG

Task completion and general knowledge are fundamental to every Bot we deliver

Language understanding, translation, spellcheck, and sentiment cognitive services are key

Dynamics 365 Knowledgebase provides a comprehensive and agile way to provide general knowledge to the Bot and tooling to the customer to manage knowledge and feedback and to manage support cases

Application insights provides highly impactful insight into technical and end user value



Bot framework surface area

Bot builder

Tools for conversational modeling, bot memory, and integration of business logic

Core platform

Provide developer broad access to Microsoft customers via Microsoft properties

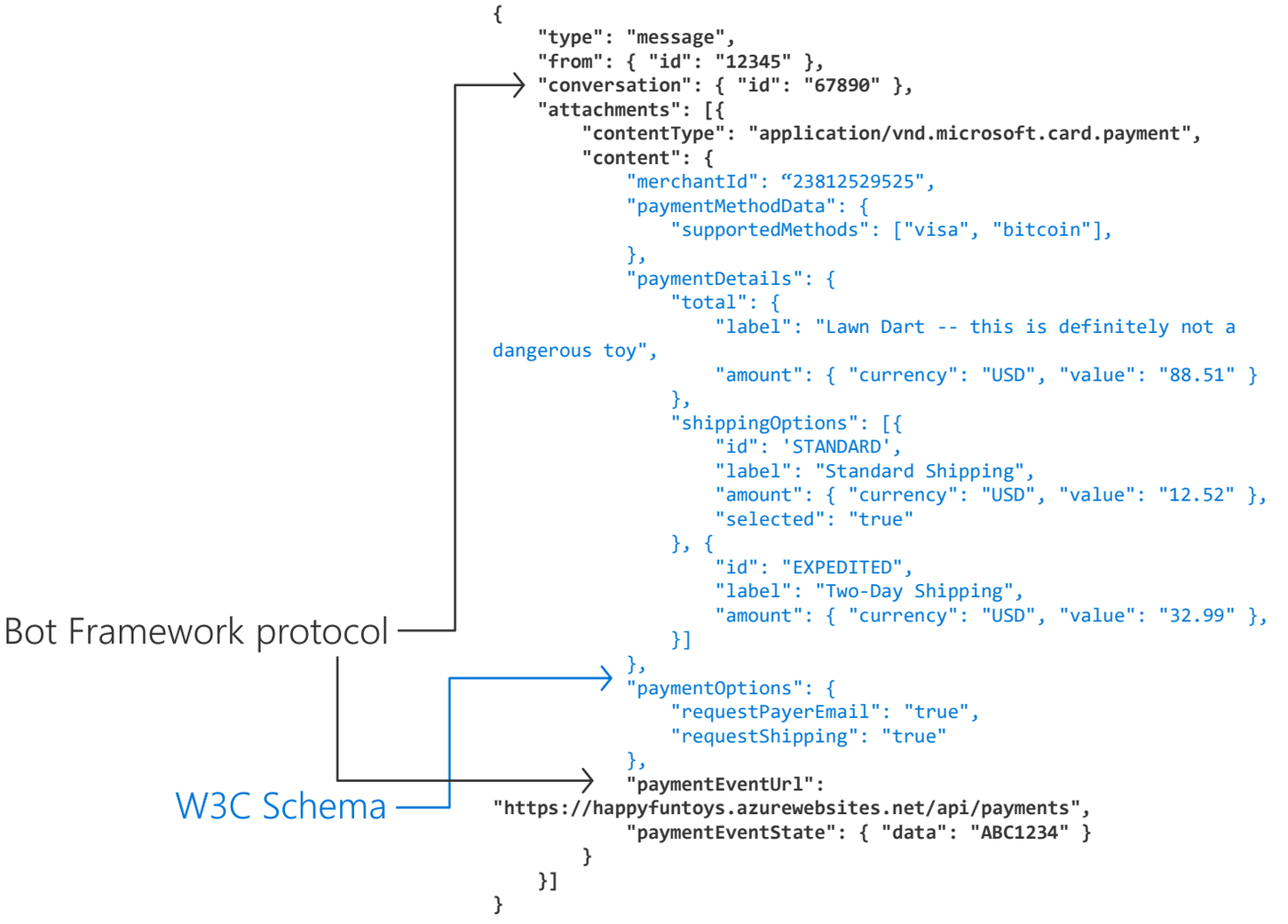
AI and resources

Democratization of AI resources such as language understanding, QnA Maker, and other cognitive services

Payment card schema

Combination of bot framework and W3C Payment Request standard

Familiar to bot devs, familiar to commerce devs



Microsoft

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