快速搭建聊天机器人

How to build a chatbot

李佳芮

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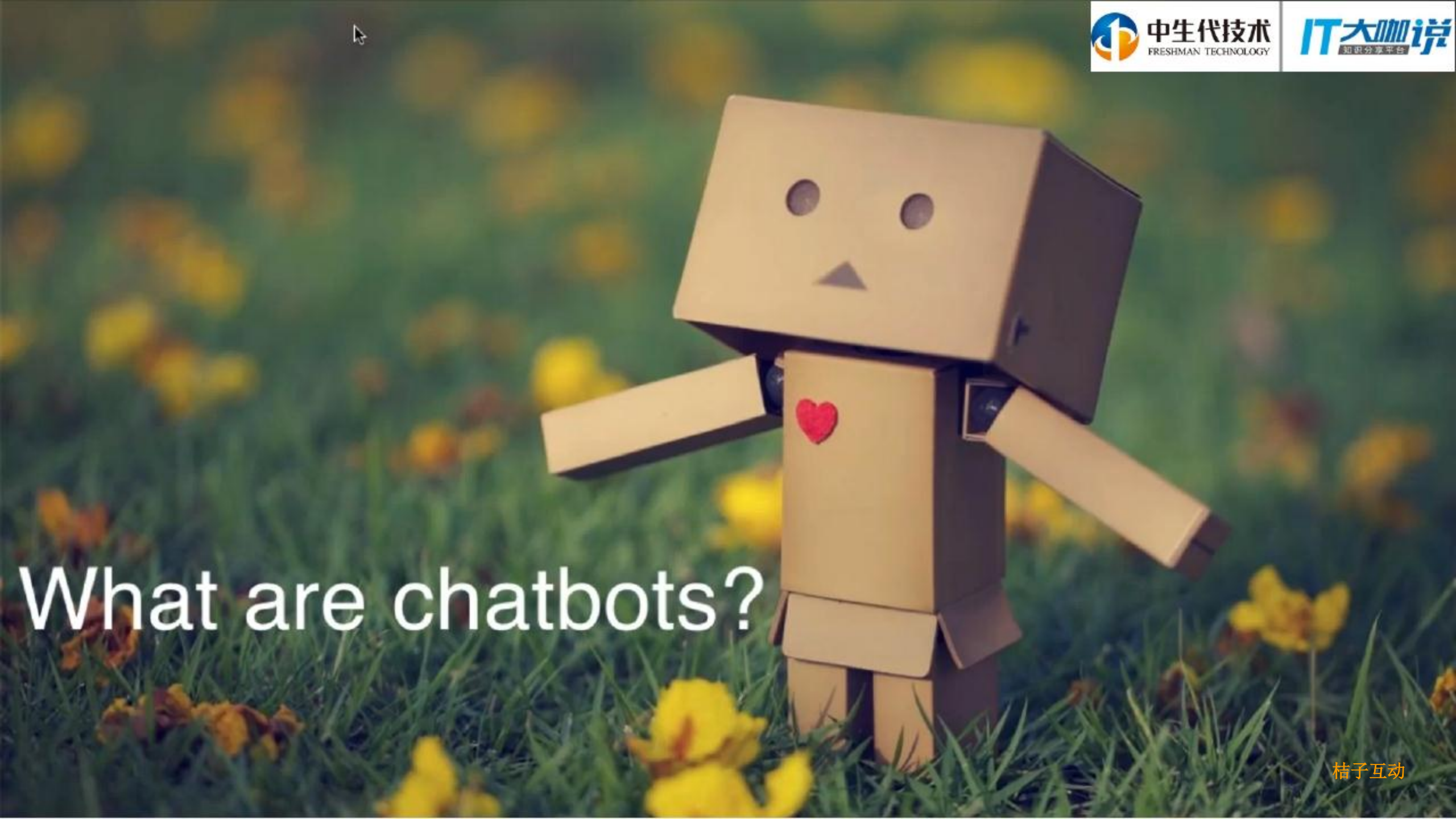

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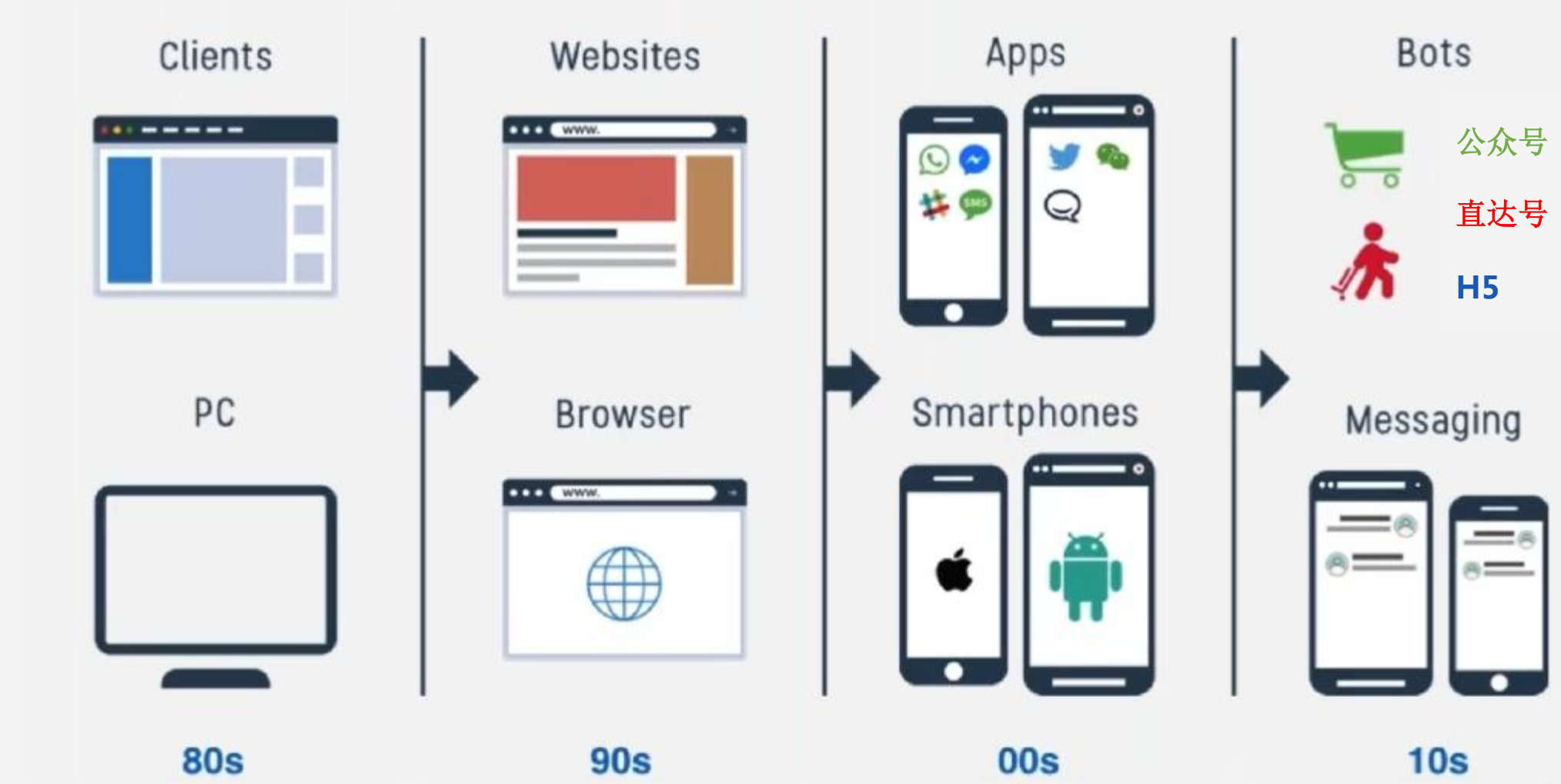
Once-in-a-decade paradigm shift



Source: https://www.gupshup.io/developer/home

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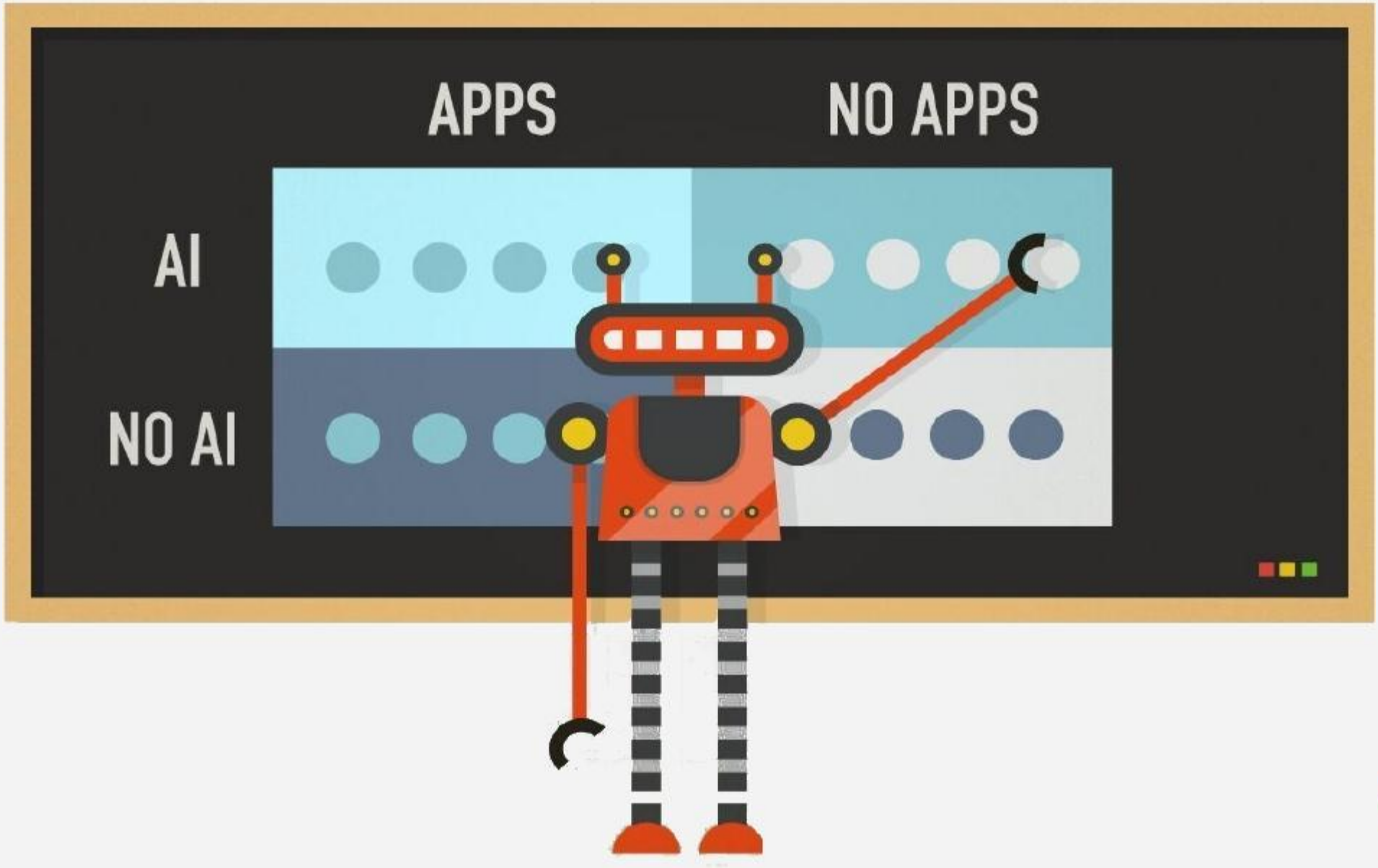
Chatbot is the Future



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What is Chatbot

“A chatbot is a service, powered by rules and sometimes artificial intelligence, that you interact with **via a chat interface**”

---- **Matt Schlicht**
CEO of Octane AI, Founder of Chatbots Magazine

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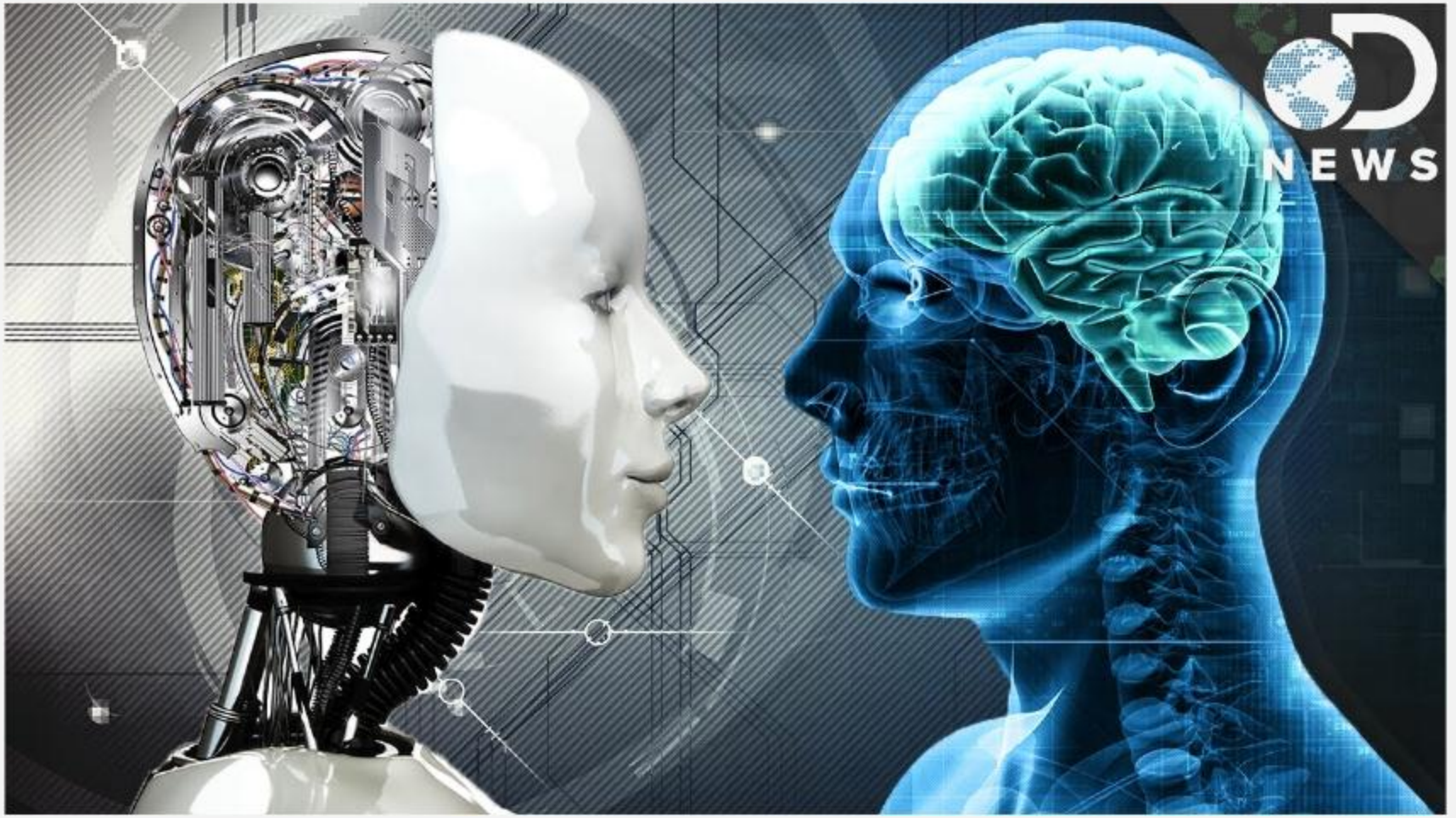
Conversation is the new UI



Apps and websites forced humans to think like computers.

Chatbots are forceing computers to think like human.

APP VS BOT

- ❌App fatigue- Users don’ t like download
- ❌User acquisition costs are high
- ❌Only short-tail apps popular
- ❌High cost of development & upgrade & marketing

- √ No installation
- √ Works even in low-network areas
- √ Zero UI
- √ Low cost of development and upgrate

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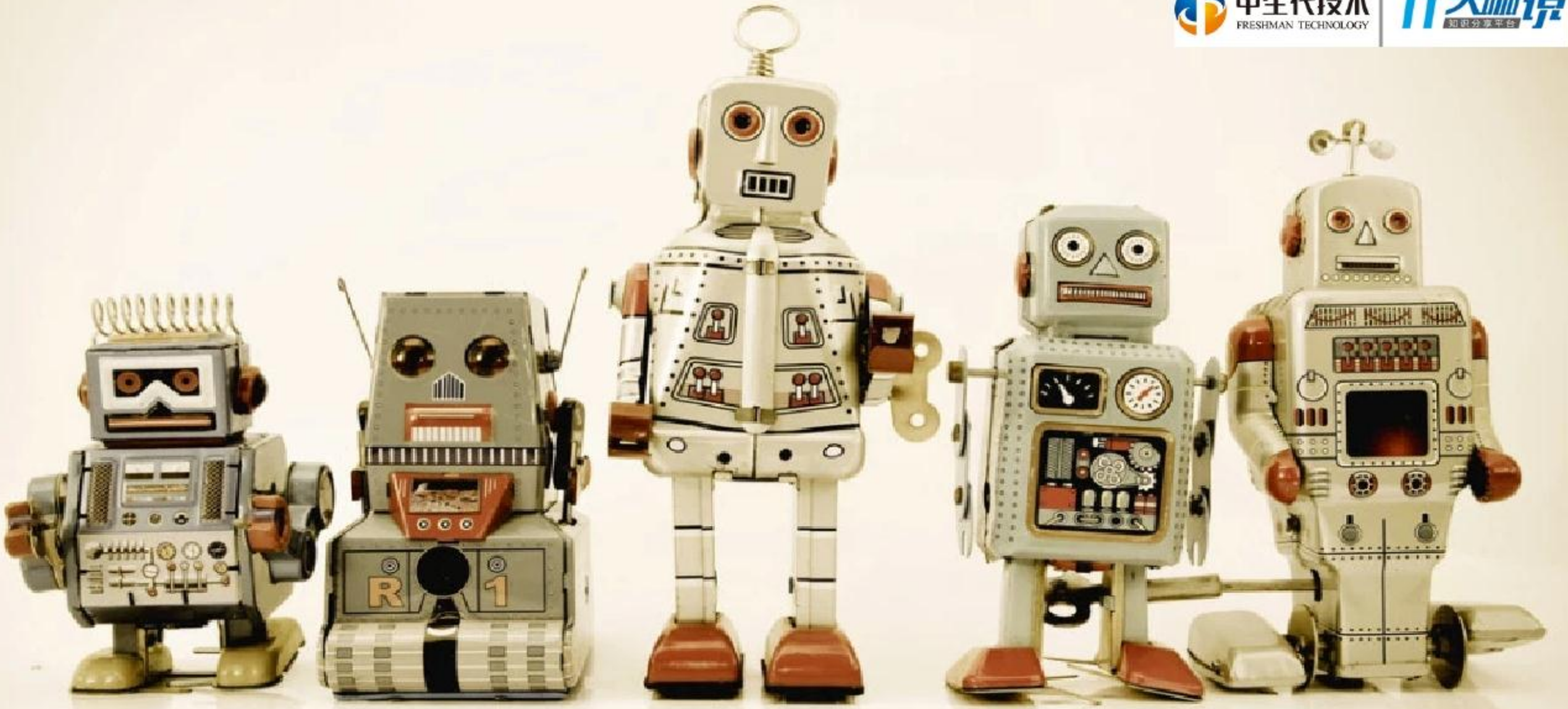

Overview of the Bot Ecosystem.

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Messaging is the new platform

Source: http://blog.gupshup.io/index.php/2016/04/

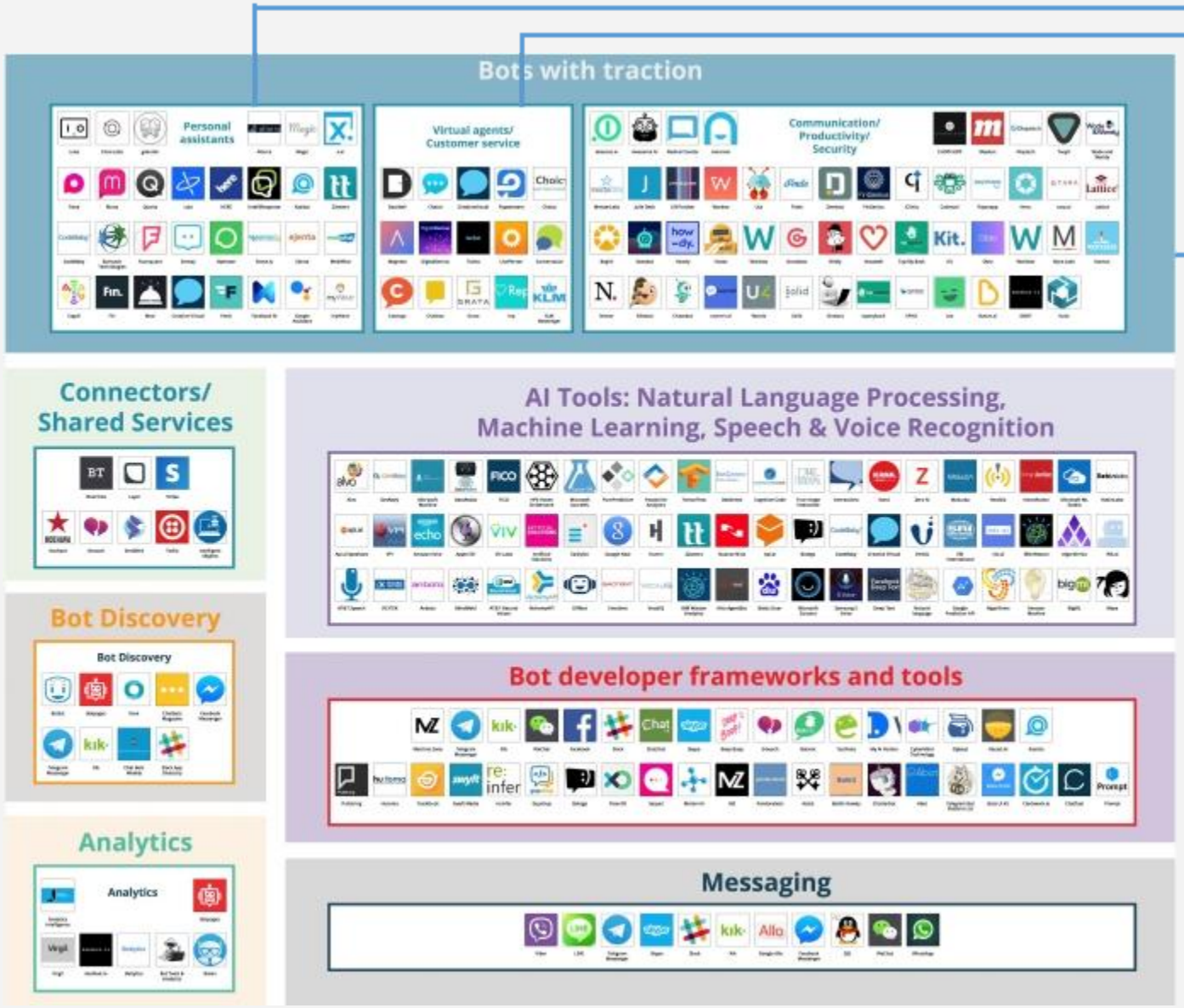
State of bot ecosystem

– Facebook Messenger opened up to developers
– Apple iOS message apps are coming this fall
– Slack, Kik, Telegram, and Skype all support bots

– Facebook has Wit.ai
– Google has Api.ai
– Microsoft has Bot Framework & luis.ai
– IBM has the Watson Conversation API

– Facebook Messenger has over 100K bots
– 100k developers working on FB Messenger bots
– Over 2 million users interact with chatbots regularly
– Thousands of bots on other platforms- Skype, Telegram, Viber, Kik

Bots Landscape



- Personal Assistants
- Virtual agents/ Customer service
- Communication/Productivity/Security

Chatbot is a industry !

Not Just AI !

Not Just Deep Learning !

Not Just High Tech !

Not Just Algorithm !

Source https://venturebeat.com/2016/08/11/introducing-the-bots-landscape-170-companies-4-billion-in-funding-thousands-of-bots/

Bots Building Tools

api.ai
VIV
wit.ai
IBM Watson
kik Developers
HOUNDIFY
craft ai
gupshup
Microsoft
motion.ai
Chatfuel
Meya
howdy.
Init.ai
Botlytics
MindMeld API

AI now = HTML in 90s

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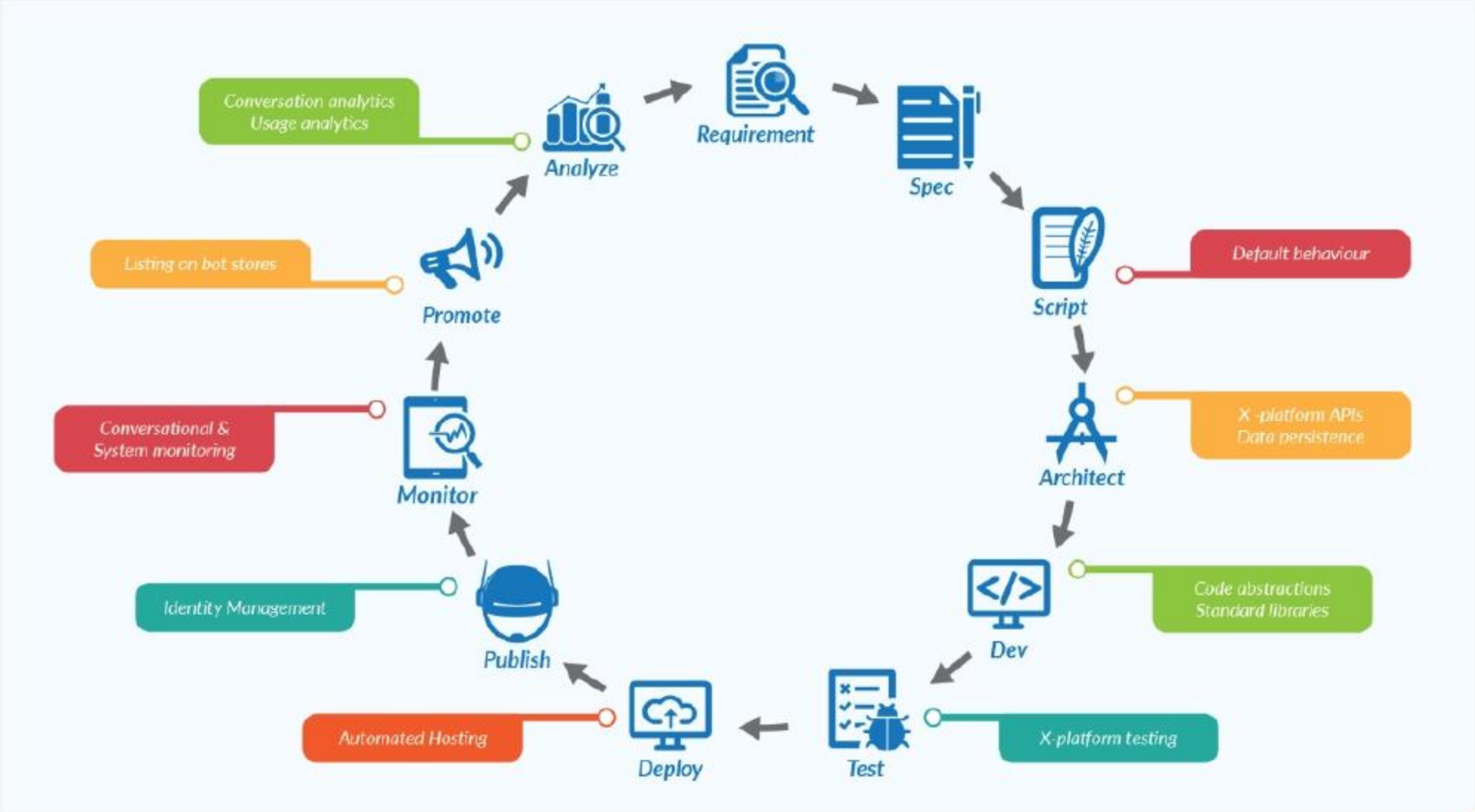
The Lifecycle of a bot



Source: https://chatbotsmagazine.com/the-bot-lifecycle-1ff357430db7

Scene Chatbot

“Focus on **innovation**, not infrastructure.”

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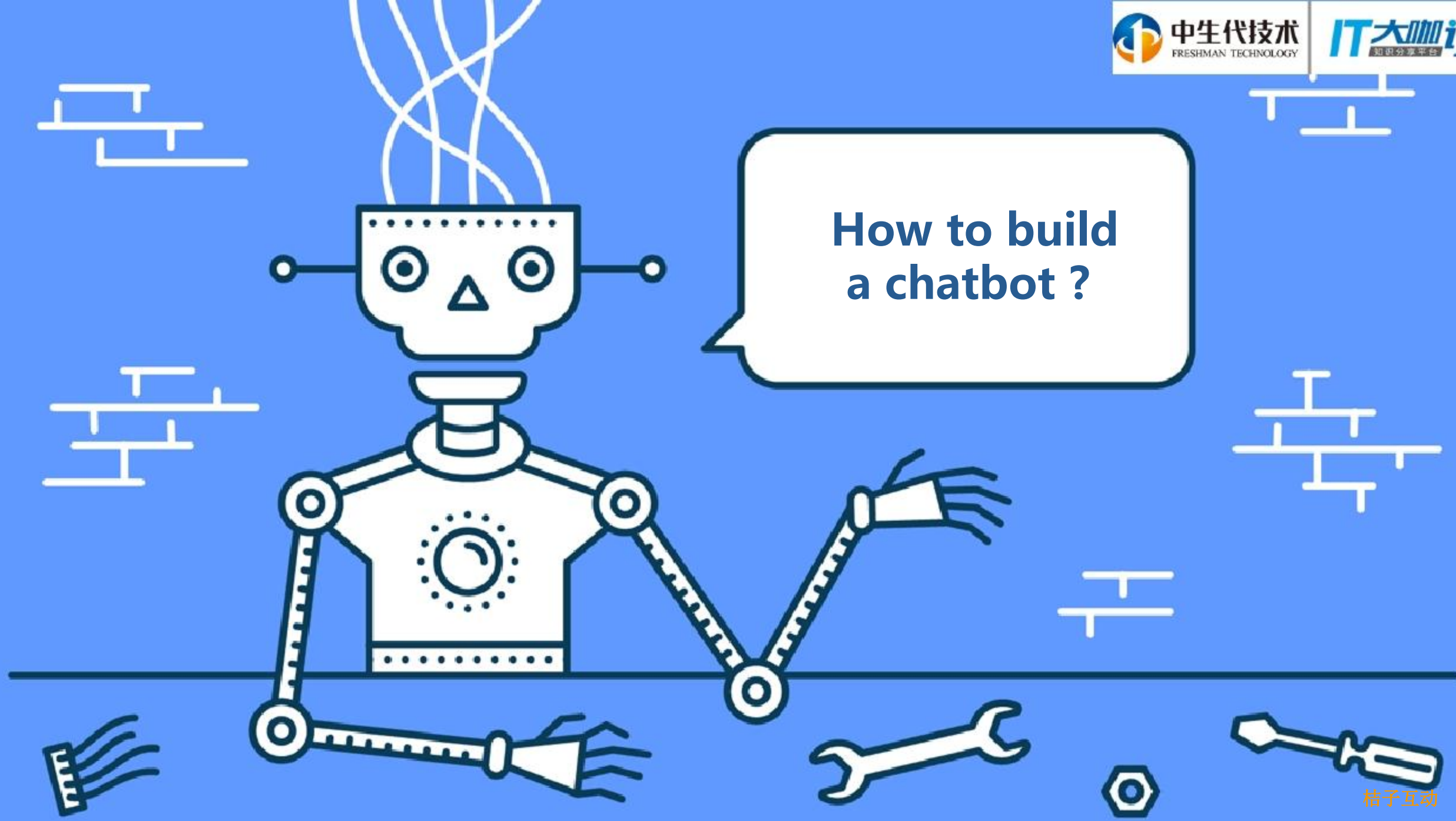

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Wechaty—wechat for bot

Connect ChatBots

Github link: https://github.com/Chatie/wechaty

WebDriver ⇔ Browser ⇔ Wechat

- ✔ Never Care About Server API:

  Webdriver puppet never touches the HTTP protocol of wechaty server API; It uses webdriver to hook angularjs in the browser. never mind the server API change.

- ✔ Behavior Like a Human

  It's very like a user use the browser.

- ✔ `PuppetAndroid` & `PuppetIos` in the Future

  WebDriver can test not only Browser, but also APP! (i.e. Appium appium.io)

Side Project: A Tracker for webwxApp.js

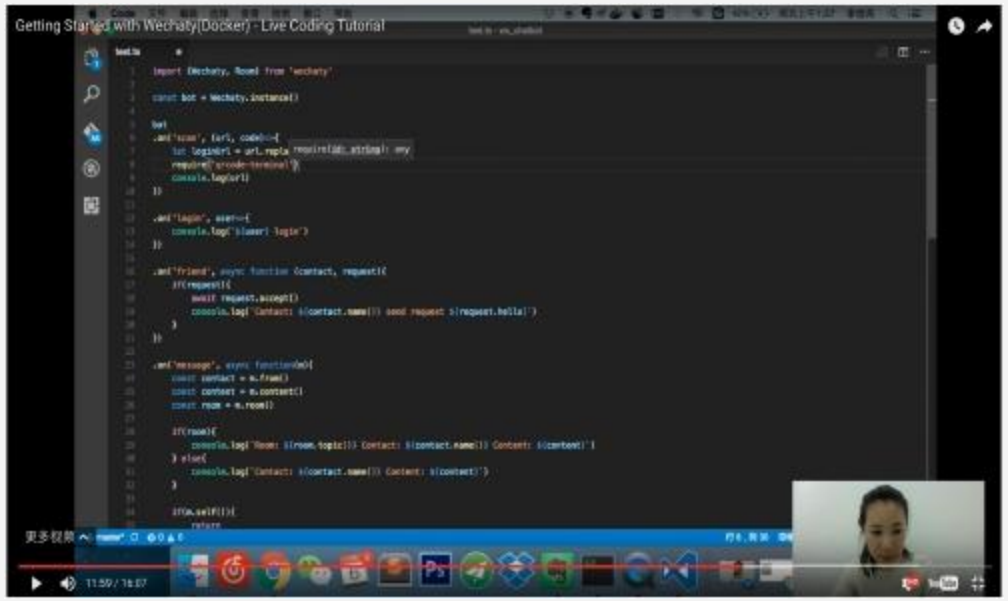
Web version of Wechat is developed by SPA Html with Angular Script nar
webwxApp.js

When webwxApp.js has been upgraded, projects like Wechaty who depends
on it might run into problem because the hook code is out of date.

I decided to track the upgrading of webwxApp.js with proactive strategy, n
only WHAT, but also WHEN, and record them all with SCM(source code
management).

Github Project URL - https://github.com/wechaty/webwx-app-tracker

The World's Shortest ChatBot Code




```
const { Wechaty } = require('wechaty') // import Wechaty from 'wechaty'

Wechaty.instance() // Singleton
.on('scan', (url, code) => console.log(`Scan QR Code to login: ${code}\n${url}`))
.on('login',       user => console.log(`User ${user} logined`))
.on('message',  message => console.log(`Message: ${message}`))
.init()
```

Get--started repo link: https://github.com/lijiarui/wechaty--getting--started.git

Wechaty Examples

1. ding--dong--bot.ts : Auto Reply Message
2. contact--bot.ts : List All Contacts by Wechat ID & Name
3. friend--bot.ts : Auto Accept Friend Request
4. media--file--bot.ts : Save Media Attachment in Message to Local
5. speech--to--text--bot.ts : Convert Voice Message to Text
6. room--bot.ts : Manage Chat Room
7. tuling123--bot.ts : Answer Any Question
8. api--ai--bot.ts : Integrate with api.ai for Intents & Entities

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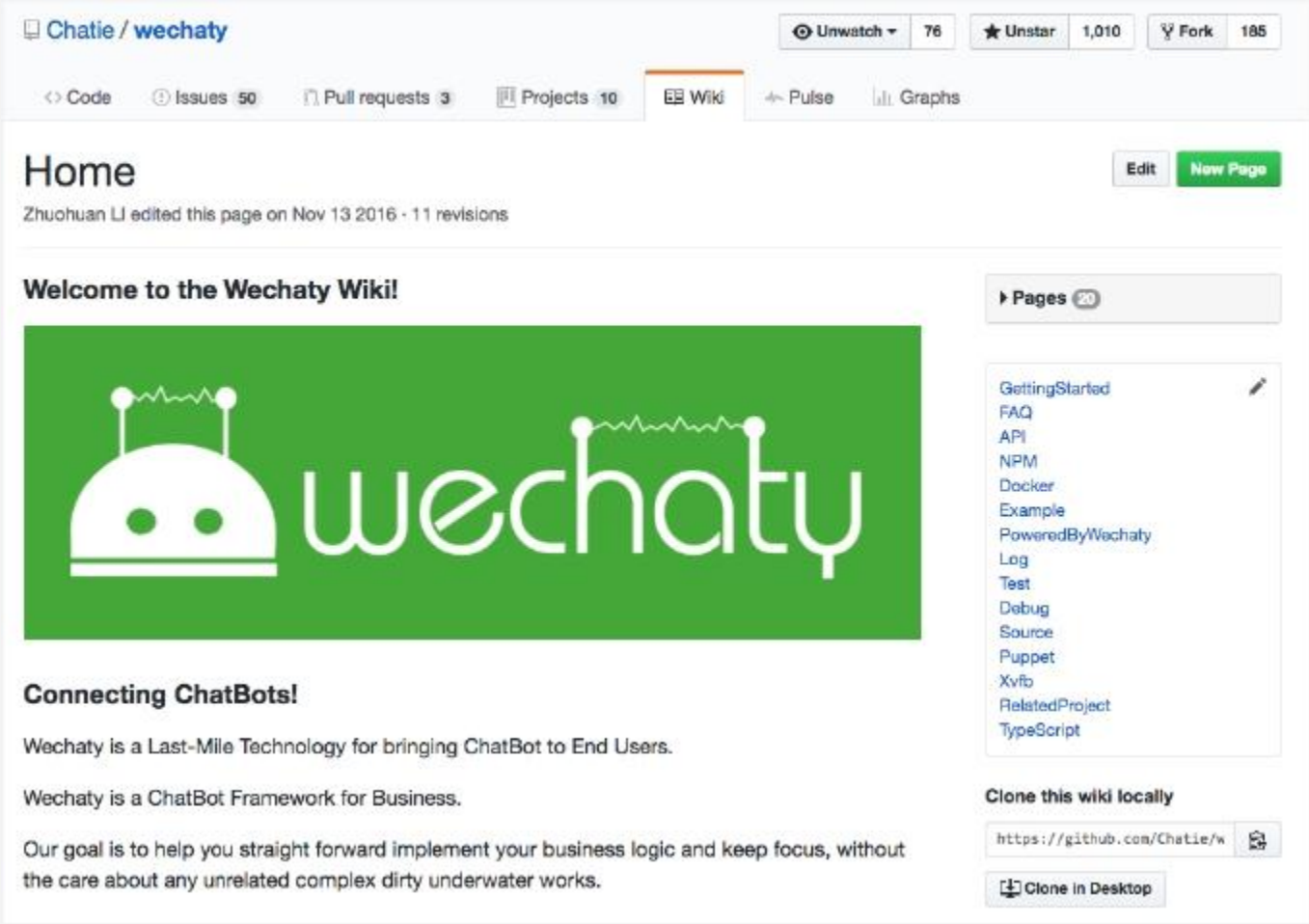
Wechaty IO Event

1. Error
2. Scan
3. Login
4. Logout
5. Message
6. Friend
7. Join(Room)



Wechaty DevOps

https://www.wechaty.io

GitHub https://github.com/Chatie/wechaty

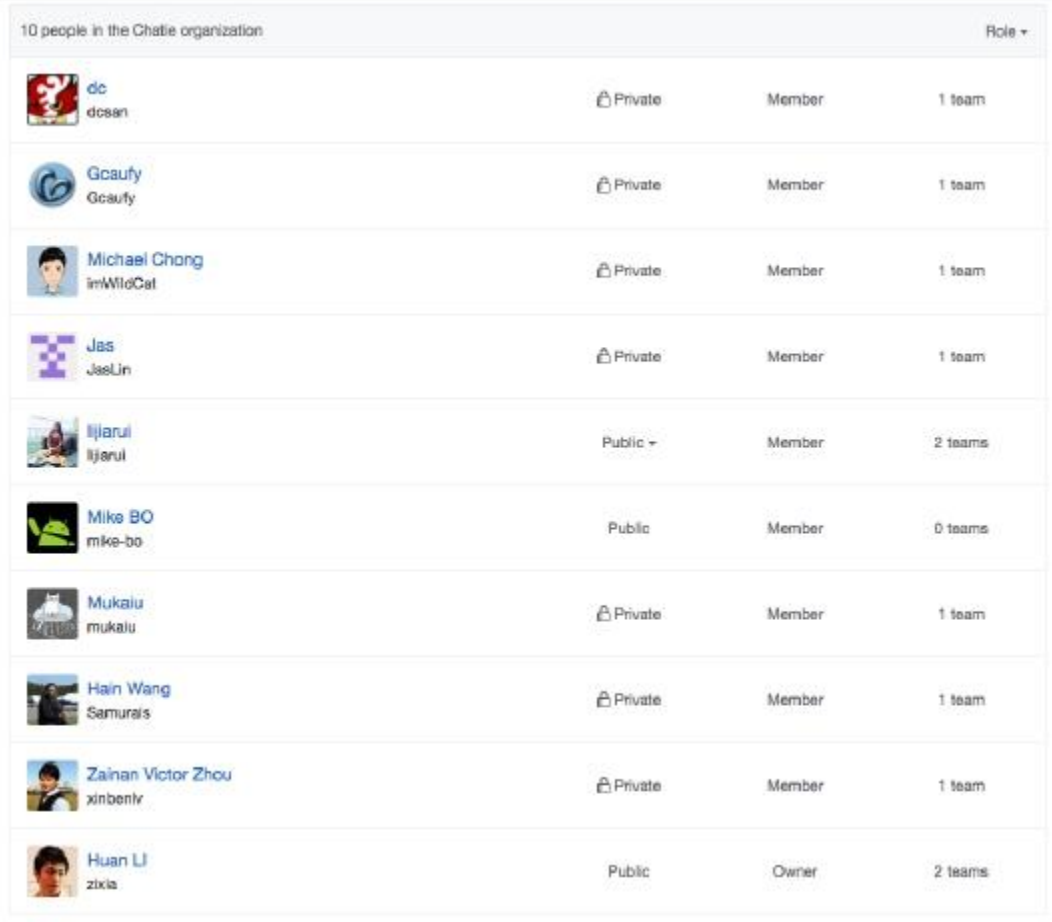
docker https://hub.docker.com/r/zixia/wechaty/

npm https://npmjs.com/package/wechaty

circleci TRAVIS AppVeyor heroku CLOUDFLARE

Wechaty Community

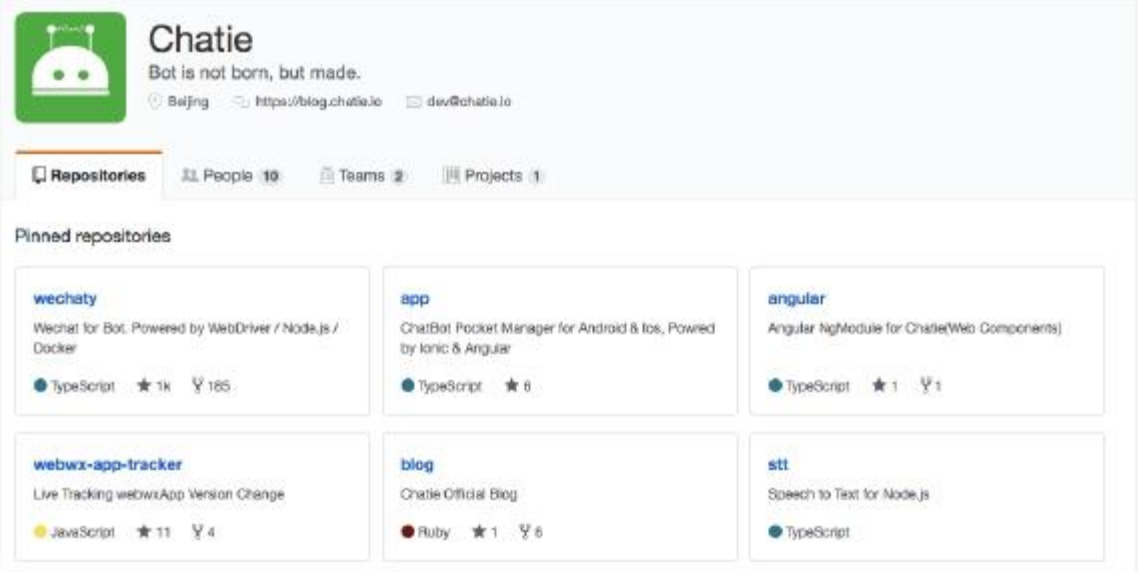
Contributor



Blog: https://blog.chatie.io/

Wechat Group

Donation: https://www.bountysource.com/teams/chatie



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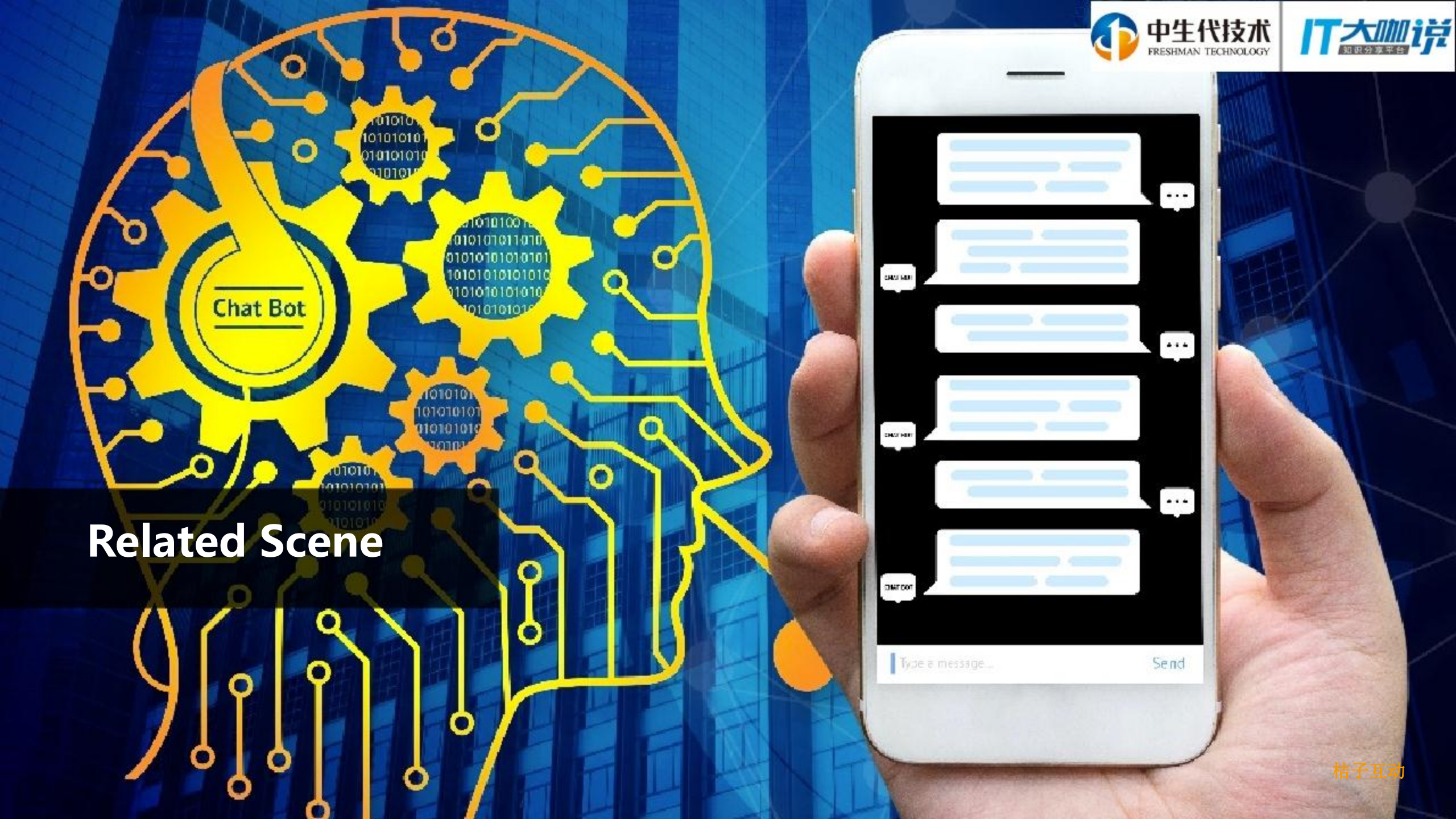

Related Scene

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Related Scene

- Wechat group customer profiles
- Invite friends into group based on keywords, forms,or fee
- Multi--group Live Message
- Select the most attractive avatar
- Store vedio/file via wechat to cloud storage
- Generate lyric and image
- Book all kinds of ticket
- Github notify
- Save group message and analysis
- ……

Review

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Thanks!