

RISE OF THE MACHINES

A GUIDE TO CHATBOTS AND AI



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What are chatbots and digital assistants?

CHATBOT HOW-TO

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#DTT: YOUR DIGITAL GUIDE



Introduction

You've probably heard the words 'chatbot', 'AI' and 'digital assistant' thrown around a lot in the past few years.

But what are they and why are they provoking such a fuss.

In this guide I'll aim to walk you through the decisions and activities involved in creating a chatbot that solves real user and business needs.

The travel sector is the perfect environment for artificial intelligence to make processes and services simpler and more effective so great opportunity lies ahead.

EMMA LAWTON
DTT Expert

CHATBOT

A chatbot is a service, powered by rules and sometimes Artificial Intelligence, that you interact with via a chat interface.

ARTIFICIAL INTELLIGENCE

Artificial Intelligence (AI) is the process of incorporating human intelligence into machines or computer systems, so that they can develop the ability to think and respond like humans. AI is a program that incorporates the problem-solving abilities of a human and it can perform tasks for humans efficiently.

DIGITAL ASSISTANT

A digital assistant, also called a virtual assistant, is an application program that can understand natural language and complete electronic tasks for the end user. Well known examples are Siri, Alexa and Cortana.

Chatbot 'How to'

**“The way people interact with AI is going
to set a new social norm.”**

STEPHANIE CHAN, HEAD OF OPERATIONS & EDITORIAL, PONCHO

Do you really need a chatbot?

It's all too tempting sometimes to decide to follow a trend in technology because everyone else is doing it or because a senior stakeholder suggests that your organisation will look like a dinosaur if you don't.

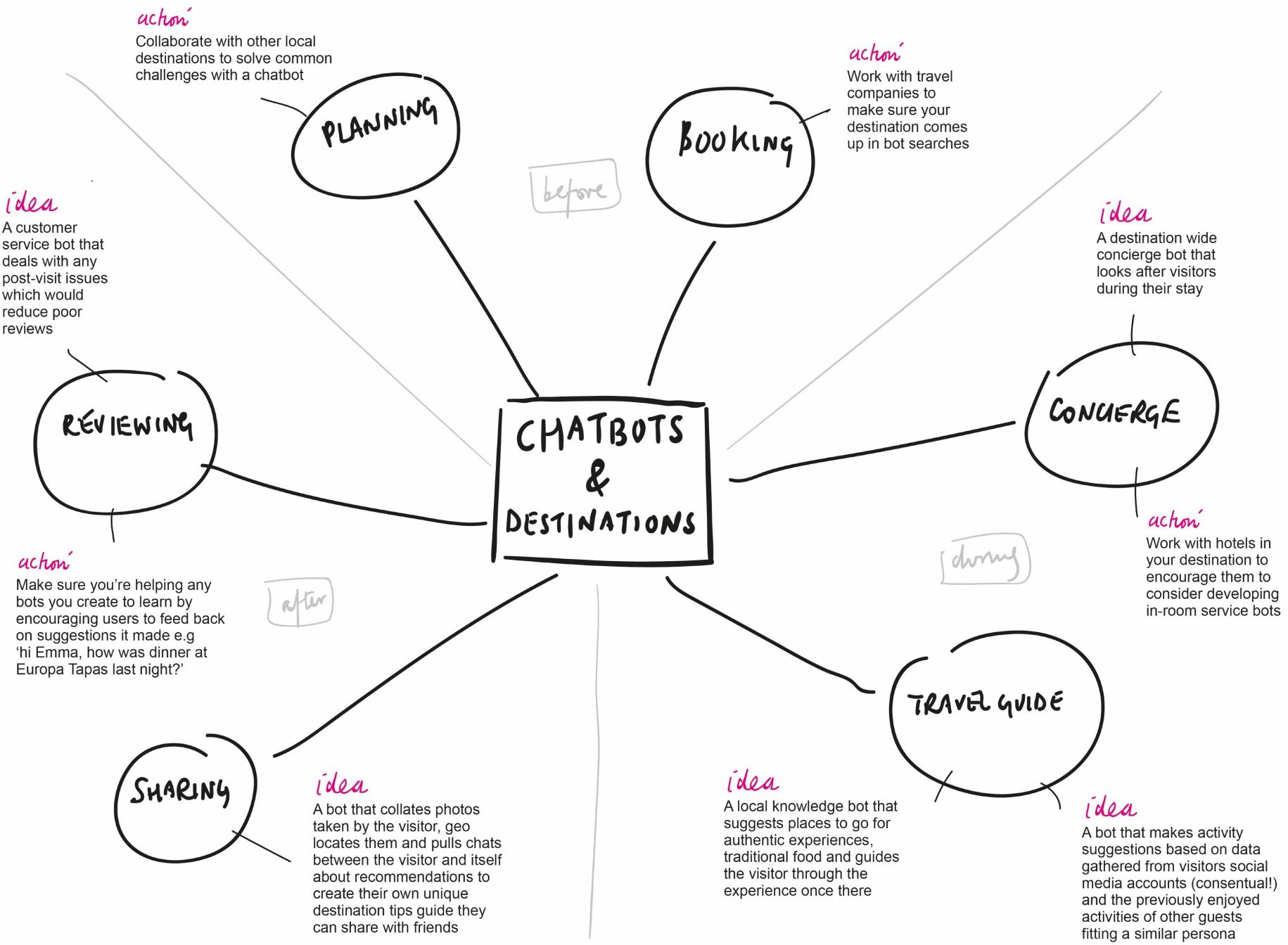
There should always be a strong business case or user need attached to every technical decision you make.

As a guide, the proposed solution should be ticking off at least one item from the Needs Checklist opposite to be considered worth pursuing.

NEEDS CHECKLIST

The proposed chatbot would:

- reduce errors
- free up skilled staff to focus on more complex tasks
- cut customer wait times
- improve customer experience
- save the business money
- compliment brand image
- reduce service bottlenecks
- allow the business to offer additional services
- gain greater customer insight



Case study: Copa Airlines 'Ana'

The Copa Airlines bot mimics interaction with a member of Customer Service staff, allowing the user to ask questions using natural language. The bot then uses particular recognised keywords to serve up pre-written questions that might relate.

For example:

| | |
|-------------|---|
| USER | <i>'can I bring 2 bags'</i> |
| BOT | <i>'how many bags can I bring?</i> |
| | <i>'what is your baggage policy?</i> |
| | <i>'i need info about delayed baggage.'</i> |

The bot pulls answers from a standard list, similar to a FAQ page, and offers related questions.

The bot satisfies both user and business needs through automating the initial stages of their Customer Service journey by triaging questions, cutting down calls to their help centre so that staff are mainly dealing with the more complex enquiries and providing a quicker, more efficient service because of this.

Do you have a question?

Ask Us

Ask me a question 

Or see the top 10 questions asked



User types their question and related searches come up to select from based on recognised keywords.

Our best answer:

HOW MANY BAGS CAN I BRING WITH ME?

Baggage Policy

Baggage allowance varies according to the route and time of the year you are traveling.

We want to remind you of some important points to consider about our baggage policy in Copa Airlines:

- On international flights, Copa Airlines allows every passenger two pieces of luggage, one carry-on and one personal item. Visit our [Baggage Policy](#) section.
- Baggage is defined as those articles such as clothes and personal effects needed for the passenger's comfort and convenience during his/her trip. For a complete list of items that are not considered baggage, please visit our [Not allowed or restricted items](#) section.
- Take in count that if you are traveling in flights from / to Bahamas and Cuba, you won't be allowed to check individual pieces over 32kg (70lb).
- To obtain a guideline on how to properly protect and pack your luggage please click [here](#)
- If your destination country is Panama and you are traveling with any perishable item, we invite you to check the Quarantine regulation in Panama, by clicking [here](#).
- For information about Interline Baggage Policy click [here](#)

How accurately does this answer your question?

If this still didn't answer your question, please contact us.

Not at all  Perfectly

Submit

Related Questions:

[I need information about my delayed baggage. Where can I find it?](#)

Bot responds with an answer which includes links out to more detailed information.

Case study: 'Hello Gbye'

Hello Gbye was born out of the frustrations associated with corporate travel booking, whether that's for yourself or for multiple employees. Through a natural feeling conversation the bot picks up on keywords and serves up suggestions for flights and also hotel, if appropriate.

The 'Travel Profiles' feature allows individuals, or those responsible for travel booking for multiple employees, to set up preferences for flights and hotels that the bot refers to when making its choices. This gives the bot a greater chance of serving up a suggestion that is suitable and therefore gaining the trust of the user.

This bot was developed specifically to meet the needs of corporate travel bookers, a demanding audience who expect ease of use and intelligent travel suggestions.

The screenshot shows the Hello Gbye mobile application. At the top, there is a navigation bar with 'The Grid' and 'My Trips'. Below this, a header bar shows 'Guest : Copenhagen : 2017-06-09' with a star icon and a share icon. The main area has a dark blue background with white text bubbles. A message from 'HelloGbye' says: 'Try something like: I need to fly to Seattle on Delta, direct, business class on Jul 18 and return on Jul 25.' A message from 'You' says: 'I need to travel to Copenhagen tomorrow for 2 nights'. A response from 'HelloGbye' says: 'Ok, I've found these options for you.' To the right, a sidebar titled 'Guest TOTAL \$733 CAD' shows 'Flight & Hotel info ... learn more' and the date 'FRI 09 JUN 2017'. Below this, a flight option is listed: 'London - Copenhagen' for '\$386 CAD' with the route 'LHR - CPH' and airline 'SAS - Scandinavian Airlines'. It details 'ECONOMY - SK500 - 1hr 50min' and 'Airbus a320'. Departure and arrival times are also shown. Callout lines point from the text 'Hello Gbye suggests flight and hotel options based on keywords from the user's conversation with the bot' to the user message about Copenhagen and the flight suggestion.

The user can save profiles for their travel preferences so that the bot can make more suitable choices

Travel Profiles

TIME SAVER [Edit](#)



Rank Your Flight Preferences

Rank the importance of all flight preferences, first being the most important.

- 1 Stops
Non-Stop Preferred

- 2 Cabin Class
Economy Preferred

He, she or it

When creating a chatbot one of the most important decisions is what persona the bot will take on.

There are choices around:

- whether the bot is human, animal, object or abstract
- whether the bot is male, female or gender neutral
- whether the bot is a particular race

The decision you make at this point will shape the bot, its personality and how it speaks and interacts with customers.

There are benefits to creating a bot that doesn't take on a human persona. There can be confusion around whether the user is speaking to a real person or not and ambiguity around this can destroy trust. Equally when it is made clear that they're communicating with a bot, a human name and natural way of speaking can bring a comfortable feeling to a conversation.

To make this decision think what works best for your brand and what kind of persona your customers might expect to speak to.



Naming your chatbot

1.

MAKE IT APPROPRIATE

Have your chatbot gender, persona and your brand values in mind when choosing an appropriate name. Giving a name to an object shows trust in it and expresses control over it so even if your chatbot is abstract and genderless it will still require one.

2.

KEEP IT SHORT

Chatbot names are most memorable when they are just one or two syllables long. They should be simple to type or say. The unofficial litmus test for this is whether typing or saying your proposed name 20 times in quick succession becomes irritating.

3.

CONSIDER VOICE CONTROL

Think of the future of your chatbot and the likelihood it will need to respond to voice commands. Clear, strong sounds that don't bear any resemblance to things you might commonly say will give the bot more of a chance at recognising their own name.

Case study: 'Hipmunk'

Hipmunk is a web based travel aggregator founded by Adam Goldstein and Reddit co-founder Steve Huffman. There is a multi-platform chatbot for the service named Hello Hipmunk

The working title for the service was Suckage but the team didn't think publications and users would warm to it so brainstormed a more appealing name. Goldstein asked his girlfriend for a few ideas and she suggested they go for a cute, misspelled animal so they could have a fun logo.

In a field where many chatbots are named after women, reinforcing the stereotype that females make better assistants, a genderless animal persona really stands out.

The screenshot shows the Hello Hipmunk landing page. At the top, there's a "NEW!" badge, the "HELLO HIPMUNK™" logo, and a subtext "Your FREE personal travel agent [hipmunk](#)". Below this is a "Learn More" button. The page is divided into three main sections: "HELLO EMAIL" (showing an email interface), "HELLO CALENDAR" (showing a calendar interface with a trip to Phoenix, AZ), and "MORE PLATFORMS" (which includes "MADE FOR MESSENGER" and "MADE FOR SLACK"). Each section has a "See More" link at the bottom. A vertical line with a dot connects the "Hello Hipmunk" text in the first section to the "MORE PLATFORMS" section.

The Hipmunk service has a chatbot which is referred to as Hello Hipmunk. It is available across multiple social platforms and via email.

The screenshot shows an email message titled "Add Hipmunk to the Email Chain". The "From" field is "Ellen", the "To" field is "Audrey, Rusty, Clark", and the "CC" field is "Hello@Hipmunk.com". The message body starts with "If you think we're driving again, you're out of your mind. I've added Hipmunk to the email chain to help us out." followed by "Hello [@Hipmunk](#), can you show us flights from Chicago to Las Vegas, leaving February 14th and returning February 20th, please?"

Identifying a suitable tone of voice

Language is an incredibly powerful tool in Customer Service and how things are written can make or break the trust between the user and your organisation.

Having a clear and consistent tone of voice is vital when writing chatbot scripts. Review your brand tone of voice and make sure you know the answers to the following questions before you start writing:

- Does your brand voice have an accent?
- Does it use regional language?
- Is there sector specific jargon your brand would be expected to use?
- How formal is it?
- Would it ever use colloquialisms?
- Does it want to be seen as approachable?
- Is it sophisticated and elegant?
- Does it mix rhythms and patterns of speech?

The language and tone of voice the chatbot employs should either mirror or compliment the brand tone of voice you're currently using.

1.

KEEP IT CONSISTENT

The way in which you're communicating as an organisation needs to follow a set of rules so that all outputs are speaking in the same tongue. Chatbots should adhere to or complement this brand language and tone style to make sure they sit comfortably alongside your other communications.

2.

GATHER INSPIRATION FROM INTERNAL STAFF AND PROCESS

Listen to the way your internal staff deal with enquiries, complaints and day to day interactions. You'll notice the language and tone of voice they use change to meet the expectations of the customer and the mood of the situation. Try to bring some of this into the tone of the script so the bot is using appropriate language.

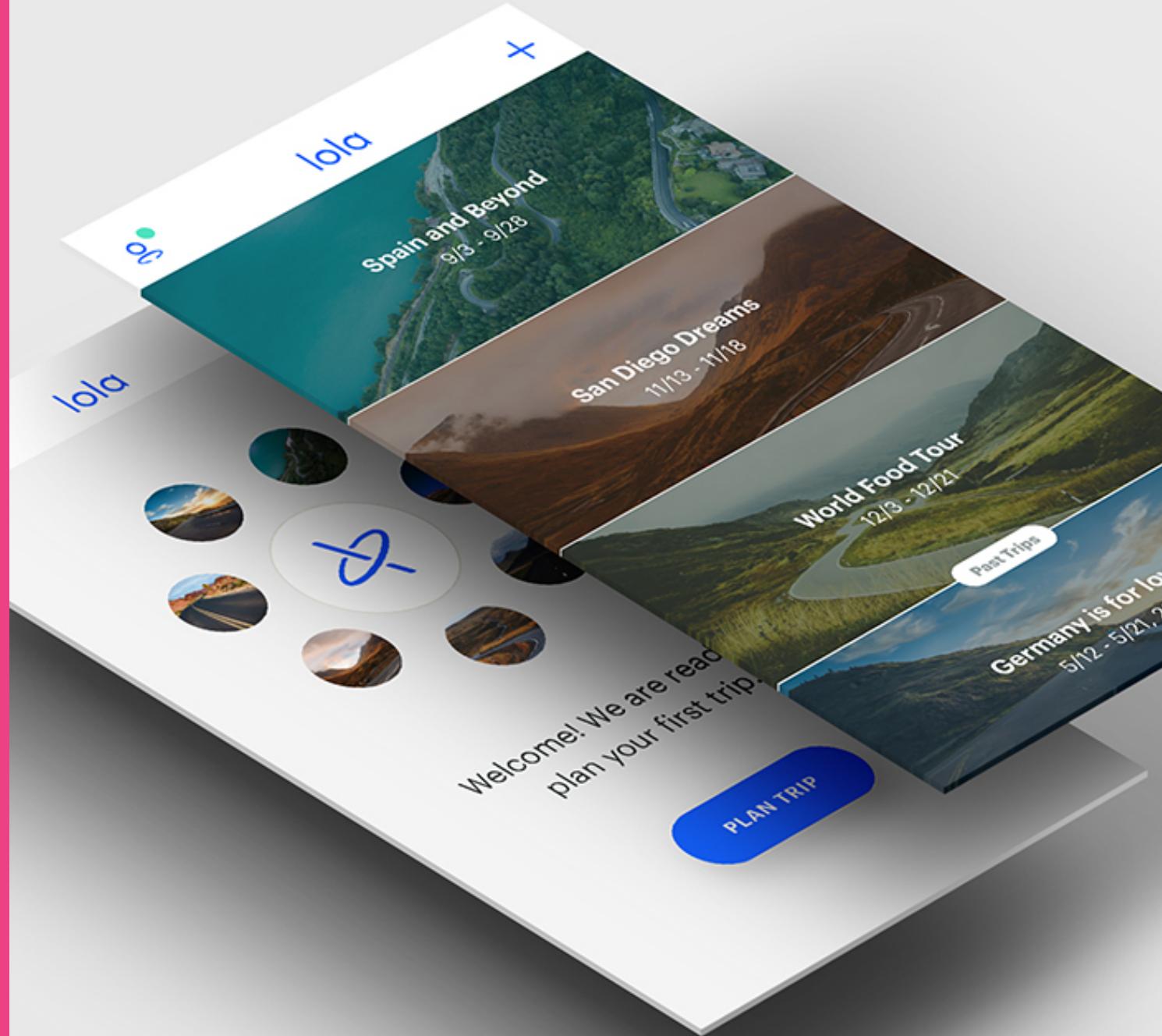
Case study: 'Lola'

Ensuring your bot speaks with a tone of voice that is natural and encourages trust from its users can be a challenge.

The Lola app offers human dialogue and experience by putting the user in contact with other people rather than relying on automated algorithms to do the work. Essentially Lola becomes your own personal travel assistant.

Each assistant has their own personality and ways of communicating but it all comes together to form the Lola tone of voice and quality of service.

The name Lola is shorthand for longitude and latitude, a system created to make seaborne navigation easier which suits the ethos of the app and reflects it's use of a common language to serve customers.



Writing chatbot scripts

To begin thinking about what your chatbot will say you need to know what business and user objectives you're hoping to achieve with it.

Finding answers to this question will guide the conversations towards meeting the end goals set for it.

I would recommend working with a professional chatbot script designer as they will be able to craft the language and conversational journeys required to make a bot successful. In the same way as amateur copy can let down a website an ill-prepared script can turn customers off and damage your brand perception.

Here are the things you'll need to let the script designer have access to:

- the business and user needs for the bot
- any tone of voice guides
- some users to test with (this can be done over the internet)
- some internal staff to help explain the business processes and to get an idea of the way they speak
- some guidance around what the key calls to action should be and where they will pull information from



hi

65% of chatbot conversations begin with the user typing the word 'hi'.

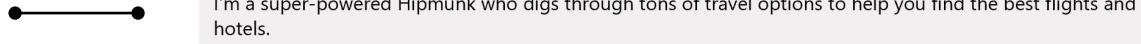
Script basics

Start with a greeting



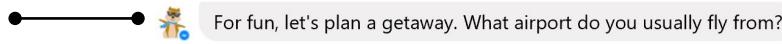
Hi hi Emma Lawton!

Intro the bot



I'm a super-powered Hipmunk who digs through tons of travel options to help you find the best flights and hotels.

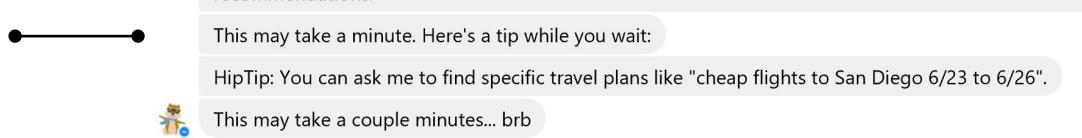
Only ever ask one question at a time



For fun, let's plan a getaway. What airport do you usually fly from?

Gatwick

Explain if there might be a wait, don't leave the user wondering



Looks like you're planning a getaway from Gatwick, United Kingdom. I'll hit you back with some great recommendations.

This may take a minute. Here's a tip while you wait:

HipTip: You can ask me to find specific travel plans like "cheap flights to San Diego 6/23 to 6/26".

This may take a couple minutes... brb

Confirm back search request so that the user knows it understands



flights from **\$128**
Fri, Sep 29 – Sun, Oct 01
Weekend Getaway!

\$128
Gatwick to Copenhagen

Show Flight Options

Show Hotel Options

Create a Fare Alert

flights from **\$128**
Tue, Aug 01 – Sat, Aug 05
5 day, 4 night trip

\$128
Gatwick to Copenhagen

Show Flight Options

Show Hotel Options

Create a Fare Alert

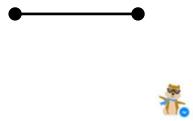
I'd like to go to Copenhagen

flights from **\$1**
Tue, Aug 01 – T
3 day, 2 niah

\$128
Gatwick to Copenhagen

Show Flight Opti
Show Hotel Opti
Create a Fare Al

Utilise links and buttons for calls to action



No prob.

Thanks Hipmunk, i'll book later

Traits of good chatbot scripts

1.

MIMICKING NATURAL CONVERSATION

The best chatbots make users forget that they aren't actually talking to a human. This is achieved by writing scripts in natural language which reflects the brand's tone of voice.

2.

ENHANCING BUSINESS PROCESSES

Chatbots must offer something of intrinsic value to the user (time saving, cost saving, improved experience etc.) Great scripts take business processes, automate and improve them.

3.

IMPROVING THE CUSTOMER EXPERIENCE

Chatbots should interact with consumers in a way that is natural and instinctive. The best scripts never feel like a marketing ploy or advert but enhance the overall brand experience.

Finding a suitable chatbot development platform

A development platform is a tool or application through which you can create a chatbot.

A few of the most popular ones are shown opposite, all of which enable you to plan and create bots without the need for advanced coding knowledge.

Each has a different interface so browse a few and see which way of working or set of features suits you and your project best.



Choosing a publishing platform

Once you have created your chatbot it needs to live somewhere online so customers can find and use it.

1.

YOUR / PARTNER WEBSITE

Your website can be a great place to use a chatbot to engage your visitors and to increase customer service levels. A branded bot on a partner website can help build reach and audience perception.

2.

SOCIAL MEDIA

Your existing social media accounts make a great platform for a bot. The most commonly used being Facebook Messenger, Kik, Slack, Telegram and WeChat. It's a great idea to talk to your customers on a platform they're already using and feel comfortable with.

3.

STANDALONE APP

Sometimes it's more appropriate to give the bot its own platform and create a standalone app or microsite. This works best if the bot is your main business service or it needs to feel more detached from your core brand offering.

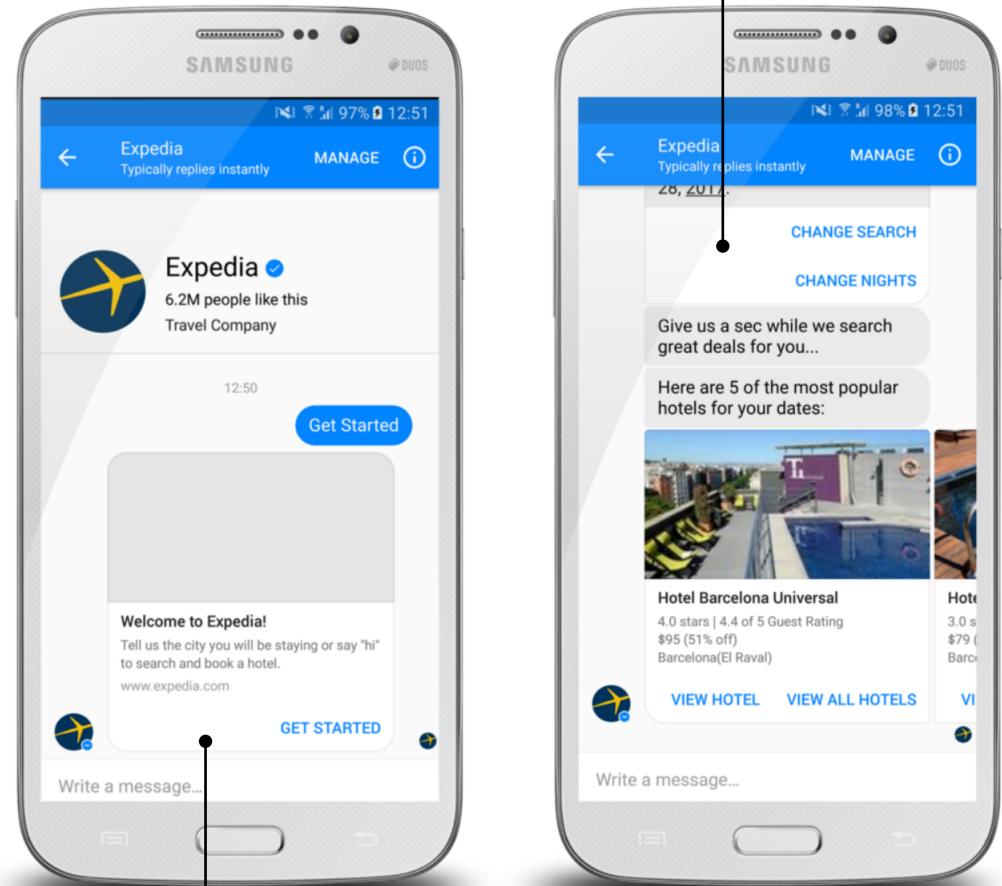
Case study: 'Expedia'

The Expedia Facebook Messenger bot is a great example of taking the traditional search process and making it more engaging and intuitive. The user is encouraged to tell the bot where they would like to travel to and it then serves up multiple options with links to view them in full on the Expedia site.

The bot is essentially replacing the form fields and filters you'd normally have to use to search on a website. This makes the experience feel more like the user is receiving recommendations from a knowledgeable travel agent rather than an impersonal tech system.

Facebook Messenger is a great platform for this bot as it's widely accessible and is where the target demographic are having most of their conversations online already so there is an inbuilt comfort and trust.

The use of colloquial language feels different from the usual Expedia brand language but is appropriate for the platform



The intro sentence explains the sorts of things the user can ask and how to communicate with the bot to set expectations up front.

Case study: 'Kayak'

Searching for travel options on Kayak has always seemed to me to be a very direct and uncluttered process. The user searches and then the user receives results.

The Slack bot takes the keywords from the user request and performs a search for suitable options, relaying these back to the user in simple text only form.

The choice of Slack as a platform for this service is a good one as it's simple and integrated into existing chats (Kayak can be brought into conversations by simply typing '/kayak' once the service has been set up).

Slack is mainly used by businesses and organisations so its the perfect place to be having conversations with users who demand an uncomplicated booking process that begins the moment they start discussing it.

#startup

24 members · Add a topic

UA 2047 CM 2160 — Arrives at 8:23am Show more...

Alice Flyer 1:39 PM
Looks like he lands in 12 minutes!

John Traveller 1:39 PM
Great. That reminds me; we also need to plan for the conference in August. Did you book our flights already?

Alice Flyer 1:39 PM
Not yet. Jeff said flights are going to be expensive. I'm worried we won't be able to justify going.
/kayak direct flights from Boston to Seattle August 8th to August 12th

KAYAK BOT 1:39 PM
All set. We just kicked off a search and will be back in a few seconds.

Searching for...
direct flights from Boston to Seattle August 8th to August 12th

We found 2 matching flights from BOS to SEA from 8/8 to 8/12:

BOS to SEA from 8/8 to 8/12 for \$786

| 7:00am BOS - 10:18am SEA | 11:40am SEA - 8:09pm BOS |
|--------------------------|--------------------------|
| 6h 18m | 5h 29m |
| Delta | Delta |

BOS to SEA from 8/8 to 8/12 for \$786

| 7:00am BOS - 10:18am SEA | 11:40am SEA - 8:09pm BOS |
|--------------------------|--------------------------|
| 6h 18m | 5h 29m |
| Delta | Delta |

[View all results on KAYAK](#)

Create a price alert Find a hotel

John Traveller 1:39 PM
☀️ A little bit cheaper would be really helpful.

+ |

Developing over time

One of the most exciting things, in my opinion, about chatbots and digital assistants is their ability to learn over time and become more effective.

Machine learning is a type of AI that provides computers with the ability to learn without being programmed with that knowledge to start with. If systems are developed in this way then they will change when exposed to new data, a trait which continues to enhance the user experience. It will look for patterns in the data it's collecting and intelligently adapt to use that information to provide a better service to the user.

As users our expectations for the level of assistance and personalisation we should receive from bots is high and machine learning is a great way to ensure we are receiving an intelligent service.



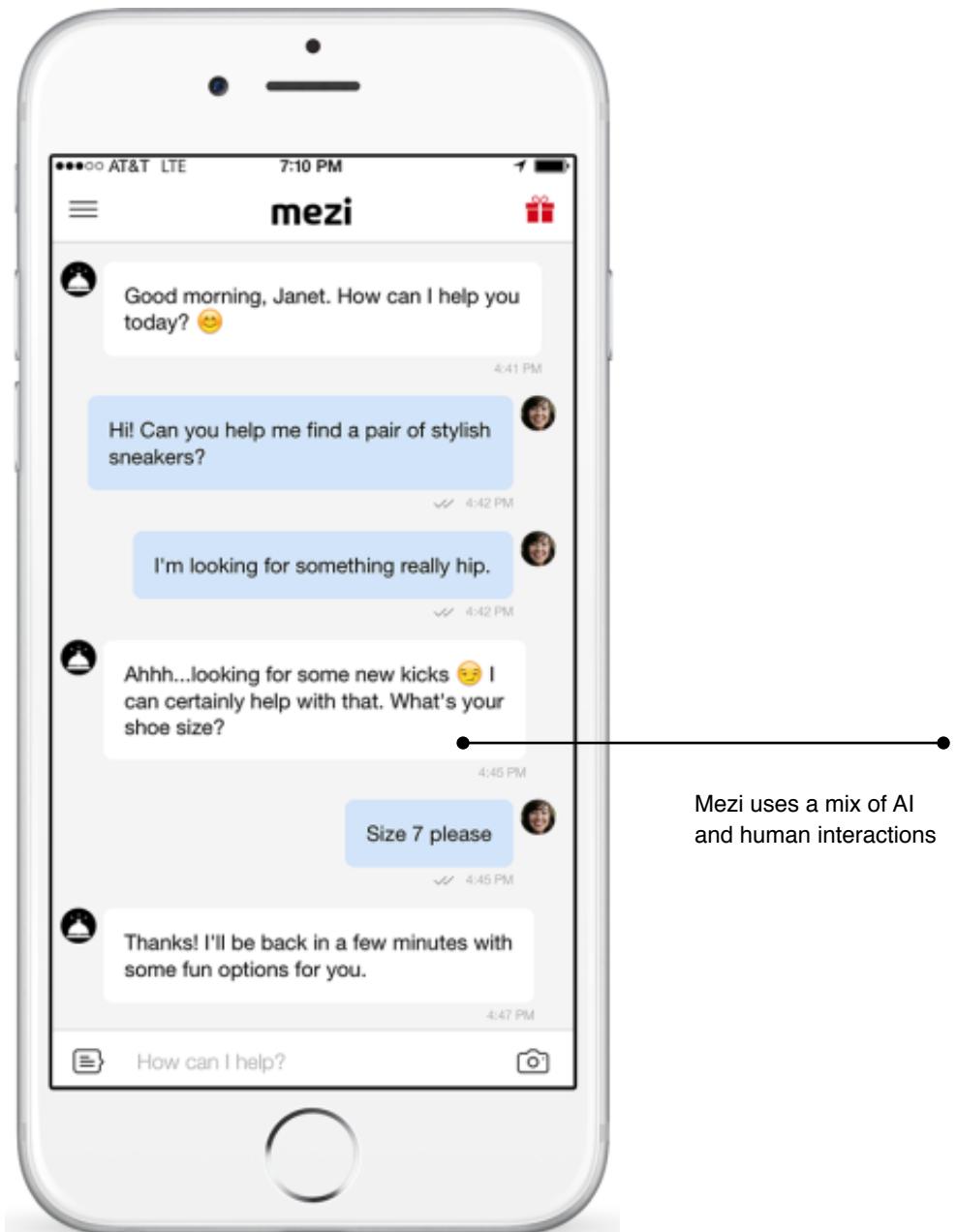
Case study: 'Mezi'

The big debate with AI has always been focused on the role of humans in its success and whether it will ultimately take over the more menial tasks they have to complete as part of their jobs.

With Mezi, the digital travel and lifestyle assistant, the user communicates with a system that seamlessly combines AI and human interactions. At present, some interactions are AI powered and others require human input but the two mesh so well that it's impossible to notice the difference.

'The goal should be that users will be completely unaware that they're dealing with a human-assisted AI bot. It's hard even for us to tell the difference between human and AI interactions in our service.' Snehal Shinde, CTO and cofounder at Mezi.

The aim is for the AI machines to constantly learn from the human interaction so they become more intelligent and knowledgeable.



Mezi uses a mix of AI and human interactions

**“Come friends, it’s not too late to seek
a newer world”**

ALFRED TENNYSON





Emma Lawton

#DTTT Expert

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If you would like Emma to help you at any point during your chatbot journey, drop her an e-mail today or give the #DTTT Expert team a call to see how we can help.



Emma is a Creative Director with a background in design for brand, print and digital combined with a strategic mind that can see the bigger picture. She enjoys flexing the boundaries of a project and experimenting with fledgling technology, leading her to create forward thinking concepts for clients in a variety of sectors. She is fascinated by the future of digital and the development of brand as part of this.

She has led projects for organisations of all sizes, run workshops for complex high-profile website re-designs and regularly speaks at conferences on the subjects of design and creativity.

As a Digital Tourism Think Tank expert, Emma can help bring valuable cross-sector insight, industry knowledge and an insatiable excitement about design to your project.

Follow her on various social channels: @ems_lawton.