CHATBOTS EMBRACING THE DISRUPTIVE POWER

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Digital Marketing Manager &
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Accenture Digital

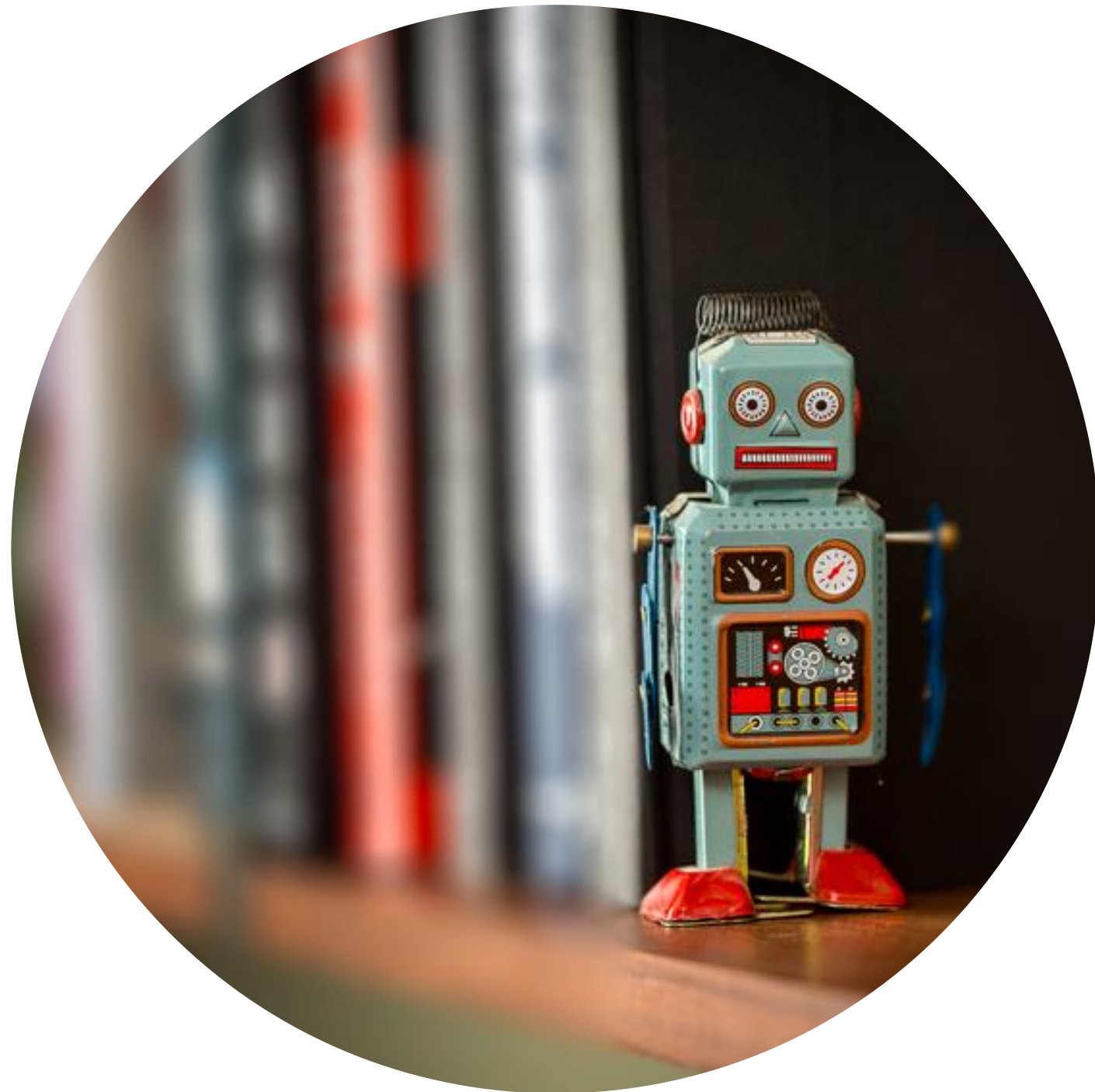OPEN 24/7 ¿Quieres entrar?

AGENDA

1. INTRODUCTION

2. STATE OF THE ART

3. CASE STUDIES

4. OUR EXPERIENCES

5. HOW TO GET STARTED

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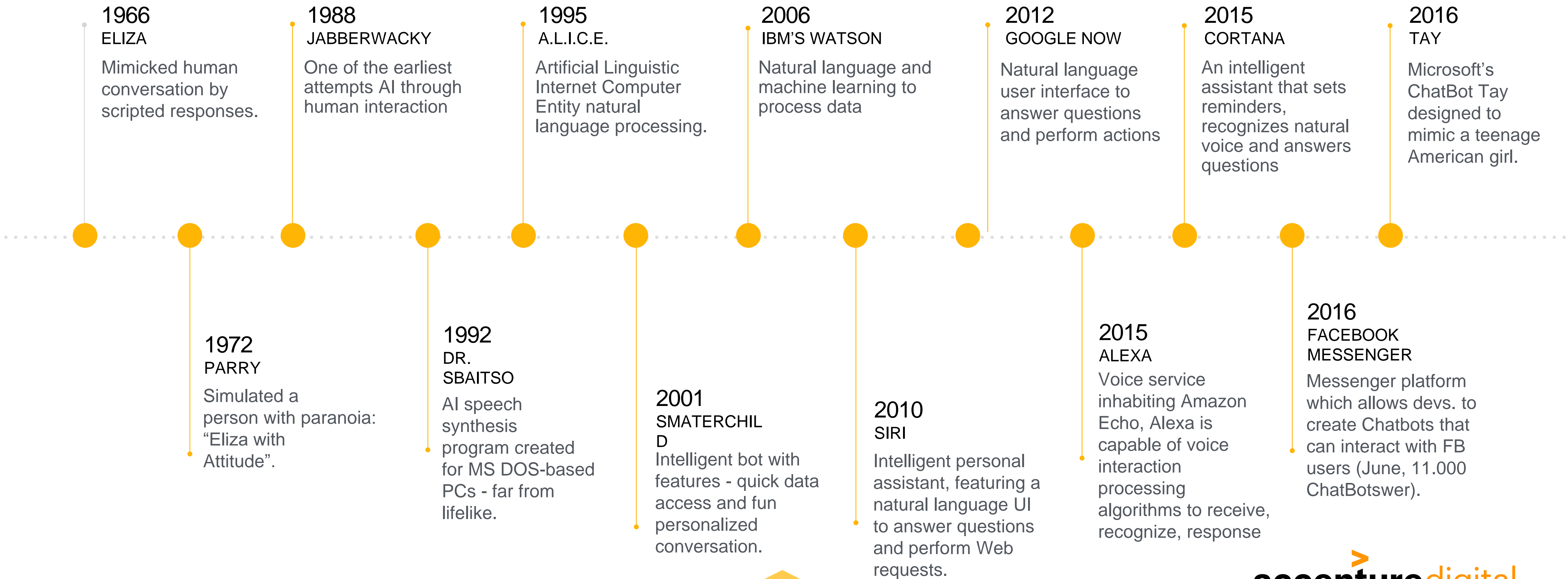
#1

INTRODUCTION

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WHAT'S A CHATBOT?

MESSAGING DRIVES THE CHABOT CHARGE

A chatbot is a digital service that can hold natural sounding conversations with human beings with the aim of accomplishing particular tasks, such as answering questions or enabling product purchases. Powered by a set of simple rules and varying degrees of AI, these bots converse with real people via messaging apps such as Facebook Messenger and Telegram.

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CHATBOT EVOLUTION

1966
ELIZA
Mimicked human conversation by scripted responses.

1988
JABBERWACKY
One of the earliest attempts AI through human interaction

1995
A.L.I.C.E.
Artificial Linguistic Internet Computer Entity natural language processing.

2006
IBM'S WATSON
Natural language and machine learning to process data

2012
GOOGLE NOW
Natural language user interface to answer questions and perform actions

2015
CORTANA
An intelligent assistant that sets reminders, recognizes natural voice and answers questions

2016
TAY
Microsoft's ChatBot Tay designed to mimic a teenage American girl.

1972
PARRY
Simulated a person with paranoia: "Eliza with Attitude".

1992
DR. SBAITSO
AI speech synthesis program created for MS DOS-based PCs - far from lifelike.

2001
SMATERCHILD
Intelligent bot with features - quick data access and fun personalized conversation.

2010
SIRI
Intelligent personal assistant, featuring a natural language UI to answer questions and perform Web requests.

2015
ALEXA
Voice service inhabiting Amazon Echo, Alexa is capable of voice interaction processing algorithms to receive, recognize, response

2016
FACEBOOK MESSENGER
Messenger platform which allows devs. to create Chatbots that can interact with FB users (June, 11.000 ChatBotswer).

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#2

STATE OF THE ART

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BUSINESS INSIGHTS

4 OUT OF 5
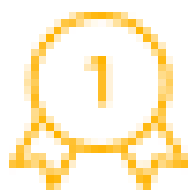of the most downloaded apps in 2016 are messaging apps.

40%
Clients expect access to digital channels to be self enabled.

50min
Is the average time spent per day by the 3 billion people using messaging apps.
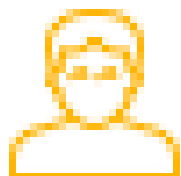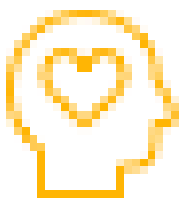
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KEY BENEFITS

improve customer
satisfaction

Increased sales
and conversions

Differentiated customer
experience

deeper customer
insights

employee
tools

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TECHNOLOGY INSIGHTS

Depending on the expected performance, it is possible to create two typologies of chatbots.

01 CHATBOT THAT WORKS BASED ON RULES

A chatBot that relies on the traditional logic tree or programming language to gather information and redirect the user towards a structured journey.

Examples: ChatBotmay, Skyscanner, PizzaHut, Sephora, Wall Street Journal…

02 CHATBOT THAT WORKS WITH A LEVEL OF AI

A chatBot meant to function more like a real conversational entity by picking up keywords and phrases from the user's input to gather information, instead of requiring direct answers to specific questions

Examples: IBM Whatson, Tay, Alexa, Cortana,.

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TECHNOLOGY INSIGHTS

High level architecture of a Chatbot-based application
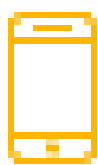
FRONT END

The messaging app is the mean of the system, the infrastructure.

It allows the bot to:

Receive the data
Provides UX & UI
Delivers the actual output (an order, an answer, assistance etc.)
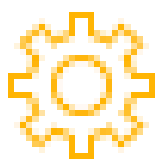
BACKEND

The AI is core of the system, the service.

It allows the bot to:

Understand inputs
Perform required task
Make task's output understandable
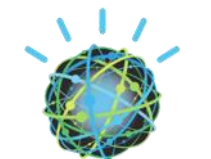
api.ai
IBM WATSON
natural language engine
openNLP™
Stanford CoreNLP

EXTERNAL DATABASE

Company's proprietary DB of customers data, products etc.

It can be leveraged in order to:

Allows training of the AI engine
Retrieve customer's information
Allow to perform omni-channel integartion

Avianca

let's Chat

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TECHNOLOGY INSIGHTS

Architecture of an omnichannel integrated digital assistant solution:

MESSAGING APP

We Chat

Fb Messenger — **API** →

Telegram — **SDK** →

Line — **WS** →

Skype

MESSAGING SERVER

Server Component

Firebase

Microsoft Bot Framework

let's Chat

NATURAL LANGUAGE PROCESSING + ARTIFICIAL INTELLIGENCE

Natural Language Processing Egines

IBM Watson   wit.ai   TensorFlow

BOT CONTROLLER

Microsoft Azure   AWS   Google Cloud Platform

redhat

BUSINESS APPLICATIONS

SAP   amaDEUS   salesforce

SERVICES

Location	Identification
Integration	Notification

OTHER CHANNELS

Stores	eCommerce
Call Center	Socials

Accenture Interactive
Part of Accenture Digital

#3

CASE STUDIES

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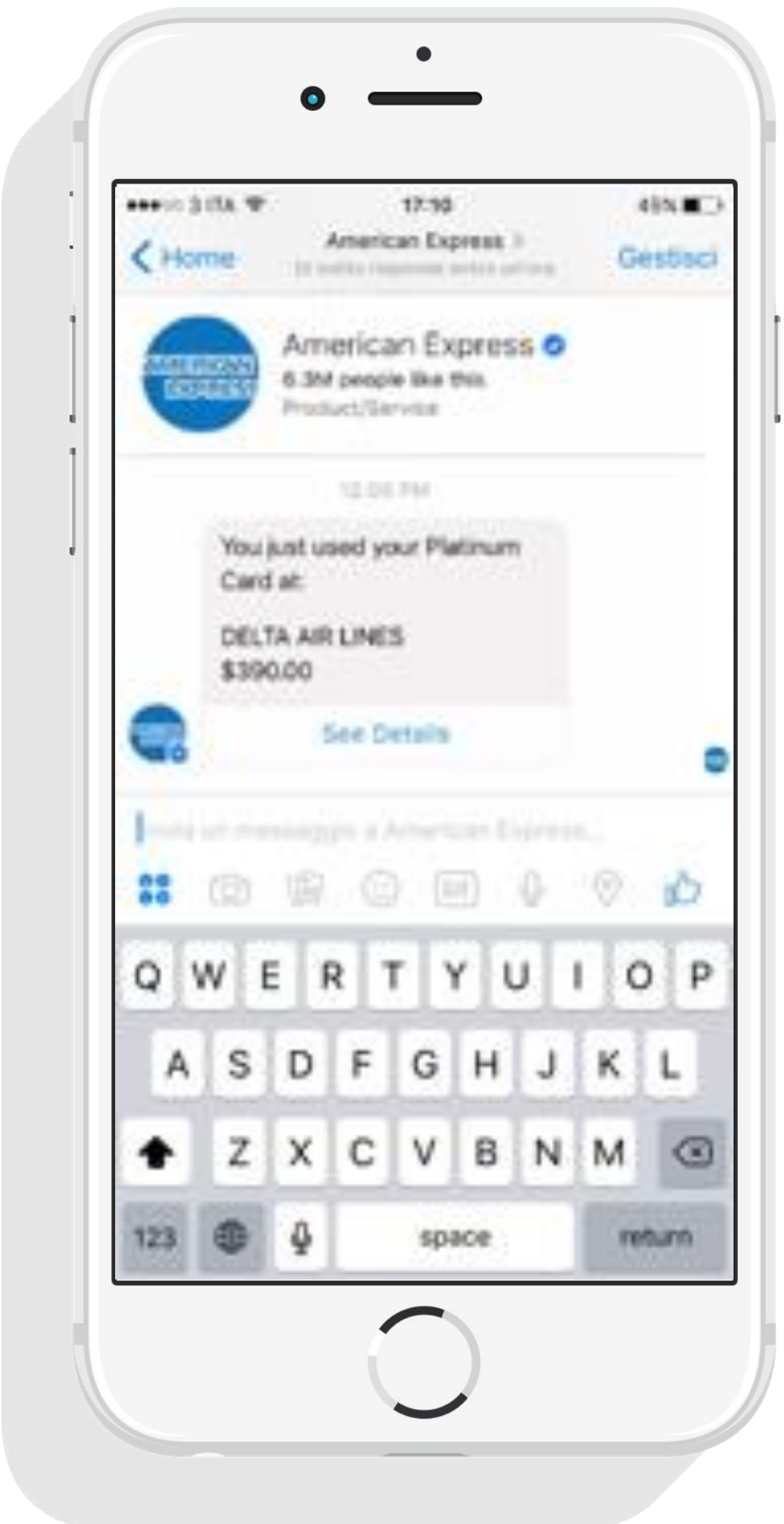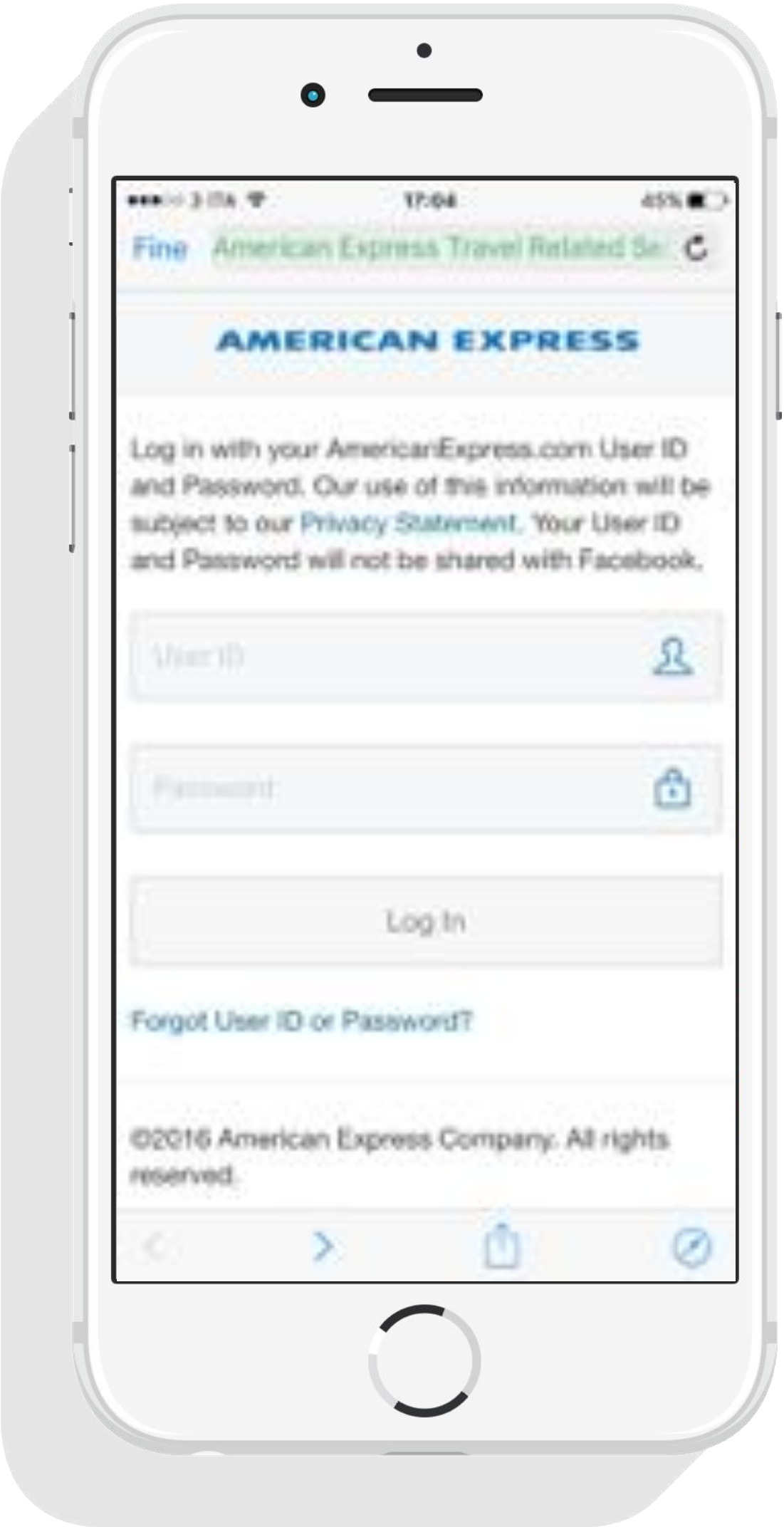
AMERICAN EXPRESS

American Express, launched a chatbot on Facebook Messenger. The chatbot allows customers to sign in its Amex online account and to access a number of geo-localized services.

HERE THE CHATBOT:

Notifies the customer after each card payment

Provides the customer with travel-related info

Make the customer aware of what to do in the area

TO LAUNCH THE CHATBOT

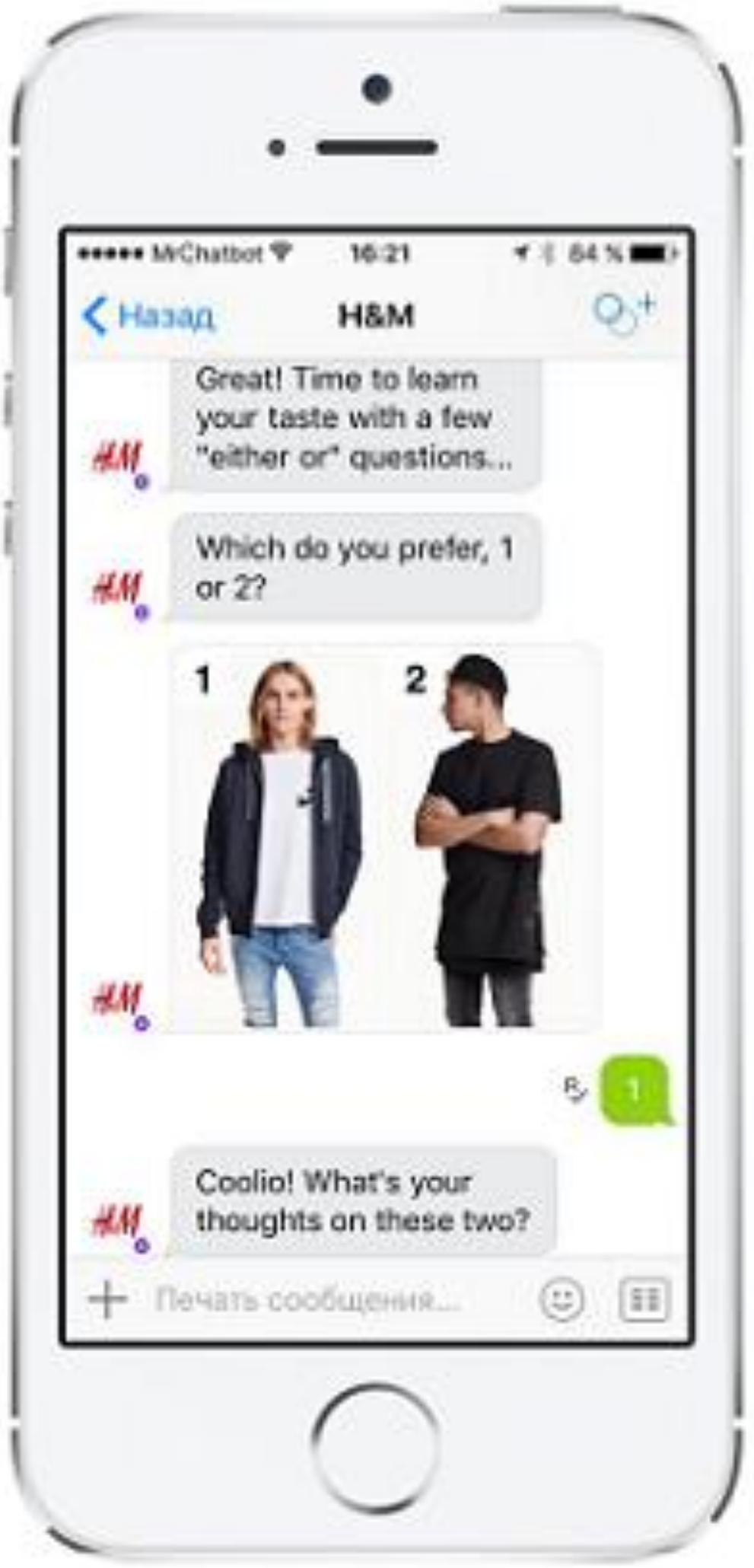Open the Facebook Messenger app

Search for the user "AmericanExpressUS"

Send "Start"

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HERE THE CHATBOT:

Introductory questions in order to define the user's style and profile.

The client has to select an item, and the ChatBot will propose an outfit.

Buy all the products from the outfit, or just select one of them.

TO LAUNCH THE CHATBOT
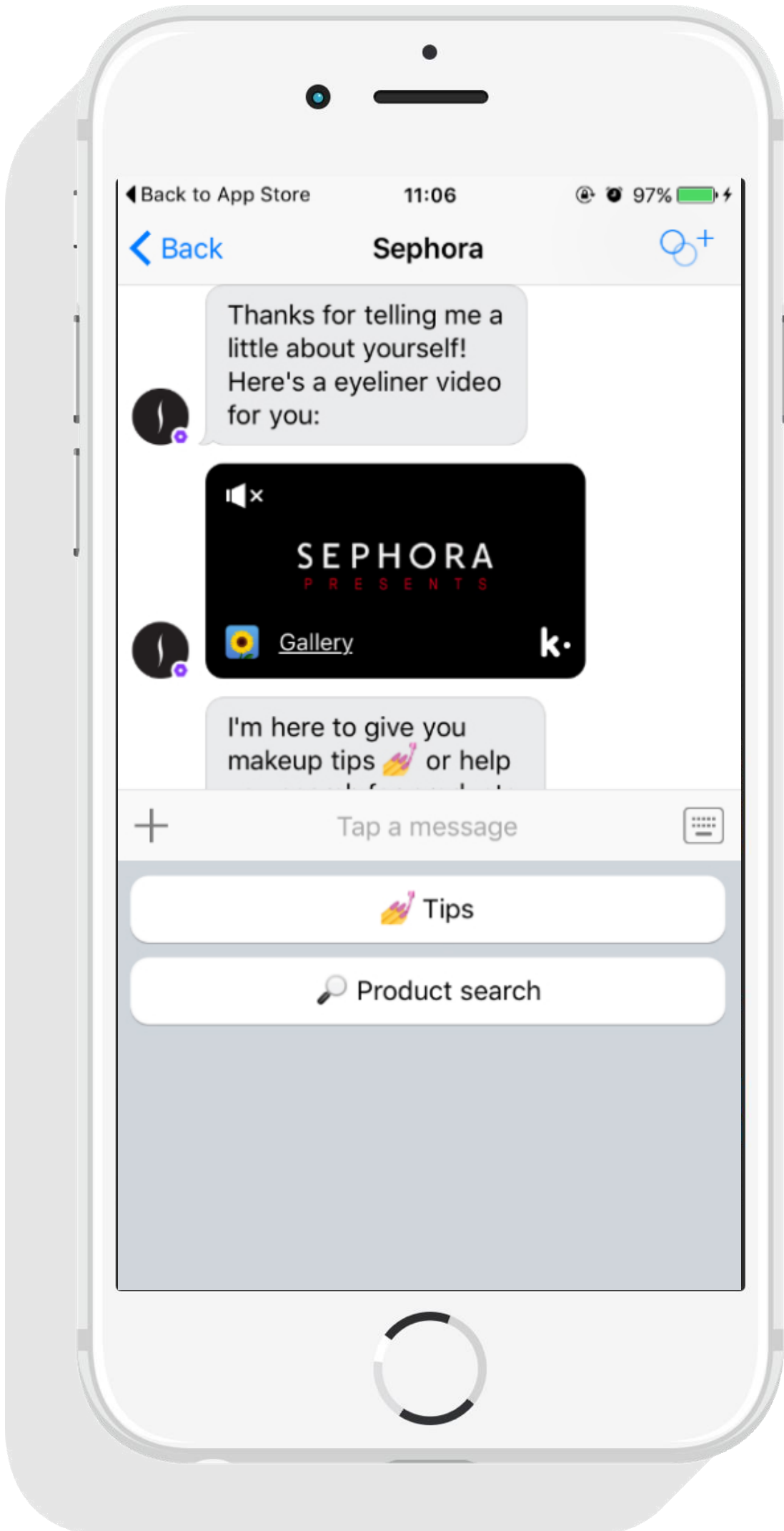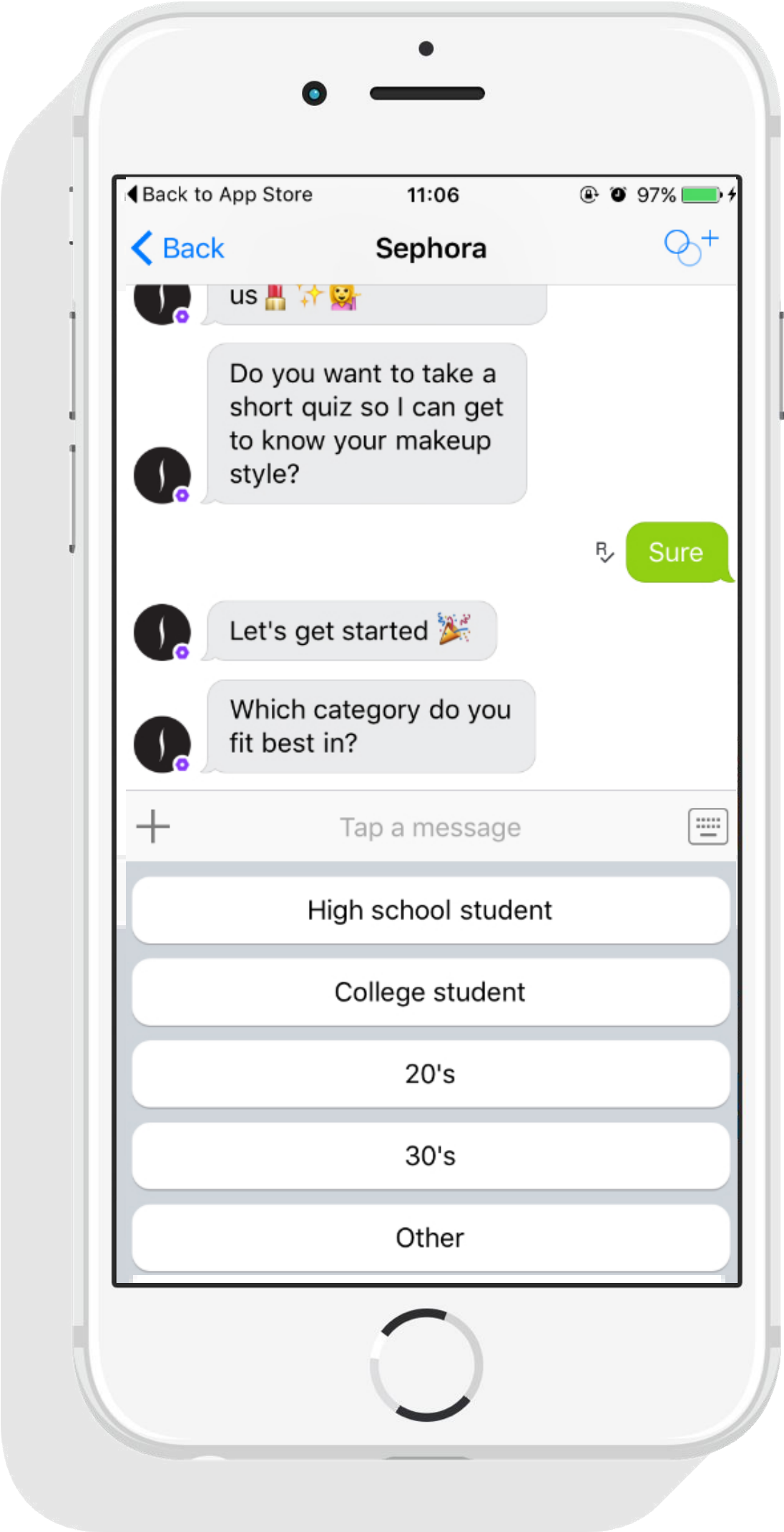
Open the App Kik

Search for the bot "H&M"

Send "Start"

H&M

H&M ChatBot offers a personalised shopping experience.

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SEPHORA

Sephora offers a ChatBot to their user community, where their customers can receive beauty tips and makeup tutorials (how-to videos).

HERE THE CHATBOT:

The ChatBot allows customers to find and buy the products that have been used during the tutorials.

TO LAUNCH THE CHATBOT

Open the Facebook Messenger app

Search for the user "Sephora"

Send "Start"

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#4

OUR EXPERIENCES

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Charlie
A 5.807 personas les gusta esto
Travel assistant

10:26

I´m Charlie your travel Assistant Bot. While, you travel, I can provide you with great information BTW. I love travel.
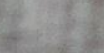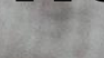
Hello

Before we move further, there are few thingsI would like to know about you

Nice to meet you

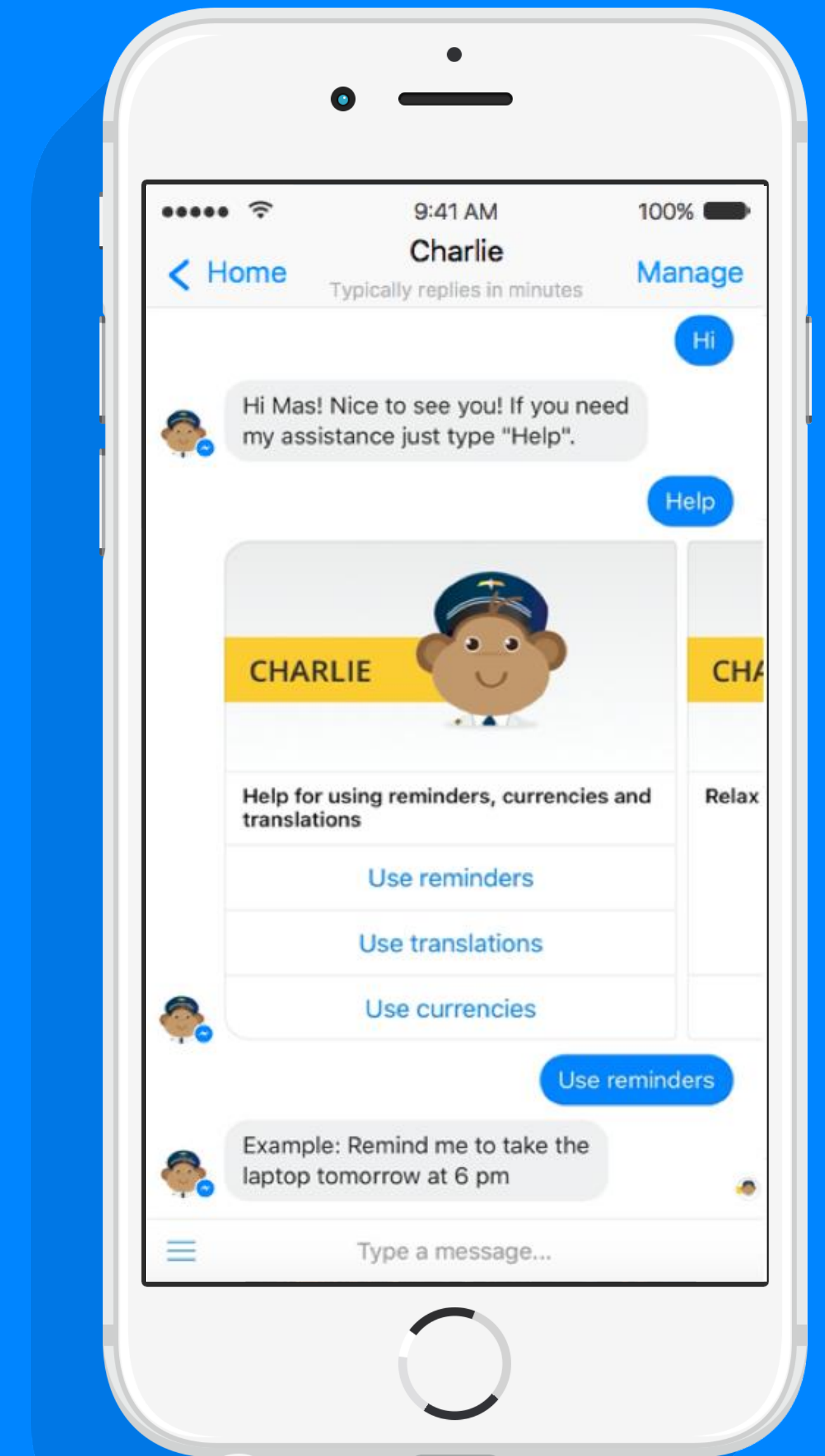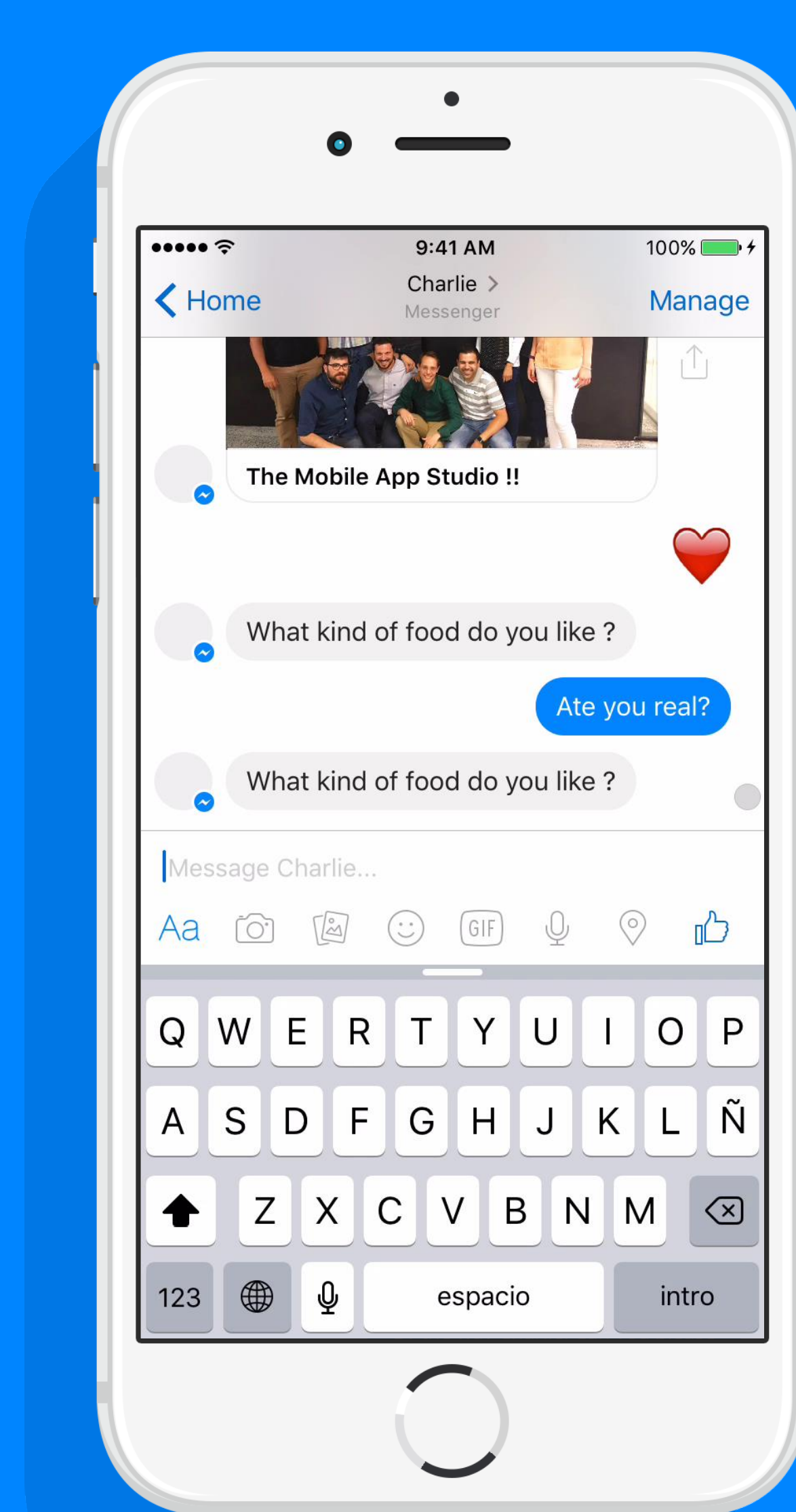Mobile App Studio Iberia

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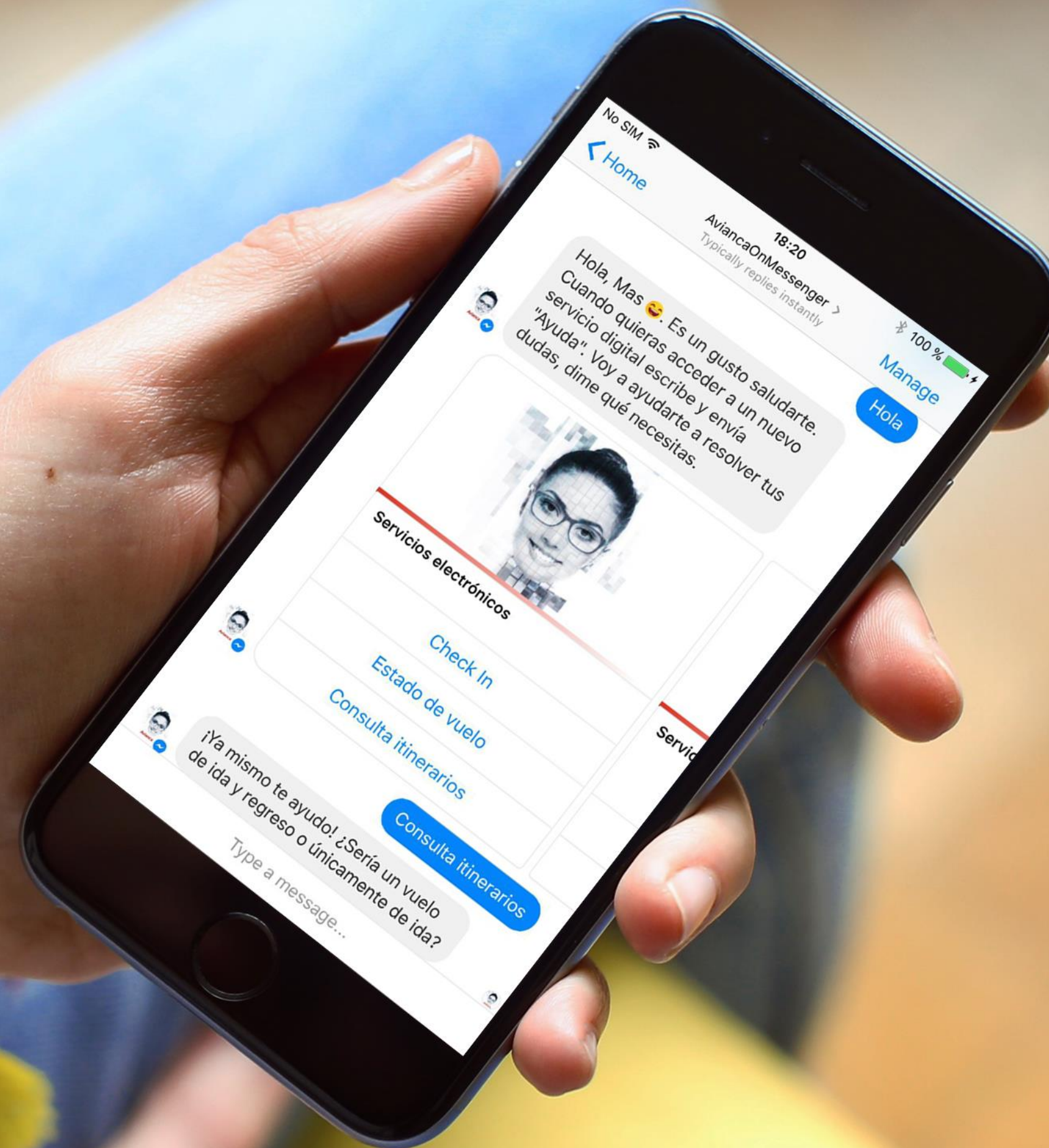
charlie the chatBot
facebook messenger

As new tech is quickly evolving, for us at @ MAS Spain is always crucial to understand its applications for creating new innovative experiences for our clients; so when we started hearing about chatbots we quickly went hands on and started tinkering with the tech to learn what the fuzz was all about.

Being part of the PoV on Travel developed by our Spain Travel colleagues , we developed together the concept chatbot: Charlie to accompany it, this is our concept of the future of digital customer assistance for travel. Charlie links multiple information sources through a single simple chat interface, it can help with many travel needs such as searching for hotels, flights, restaurants as well as other functions like reminders, translations, getting an Uber or checking the weather.

The project was completed in 4 weeks.

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carla the chatBot
facebook messenger

Mobile App Studio Iberia

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Hola,
we love
you
Charlie !

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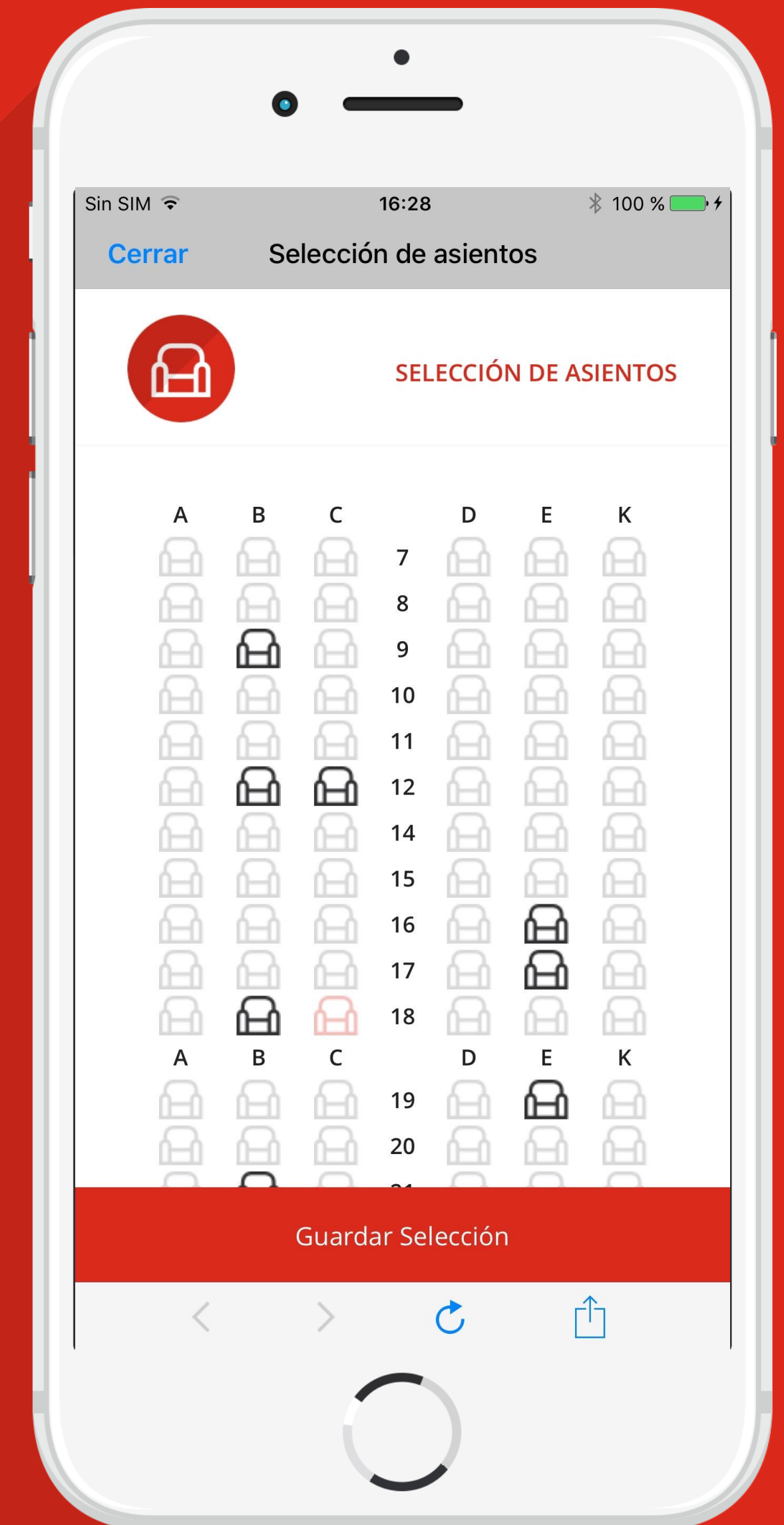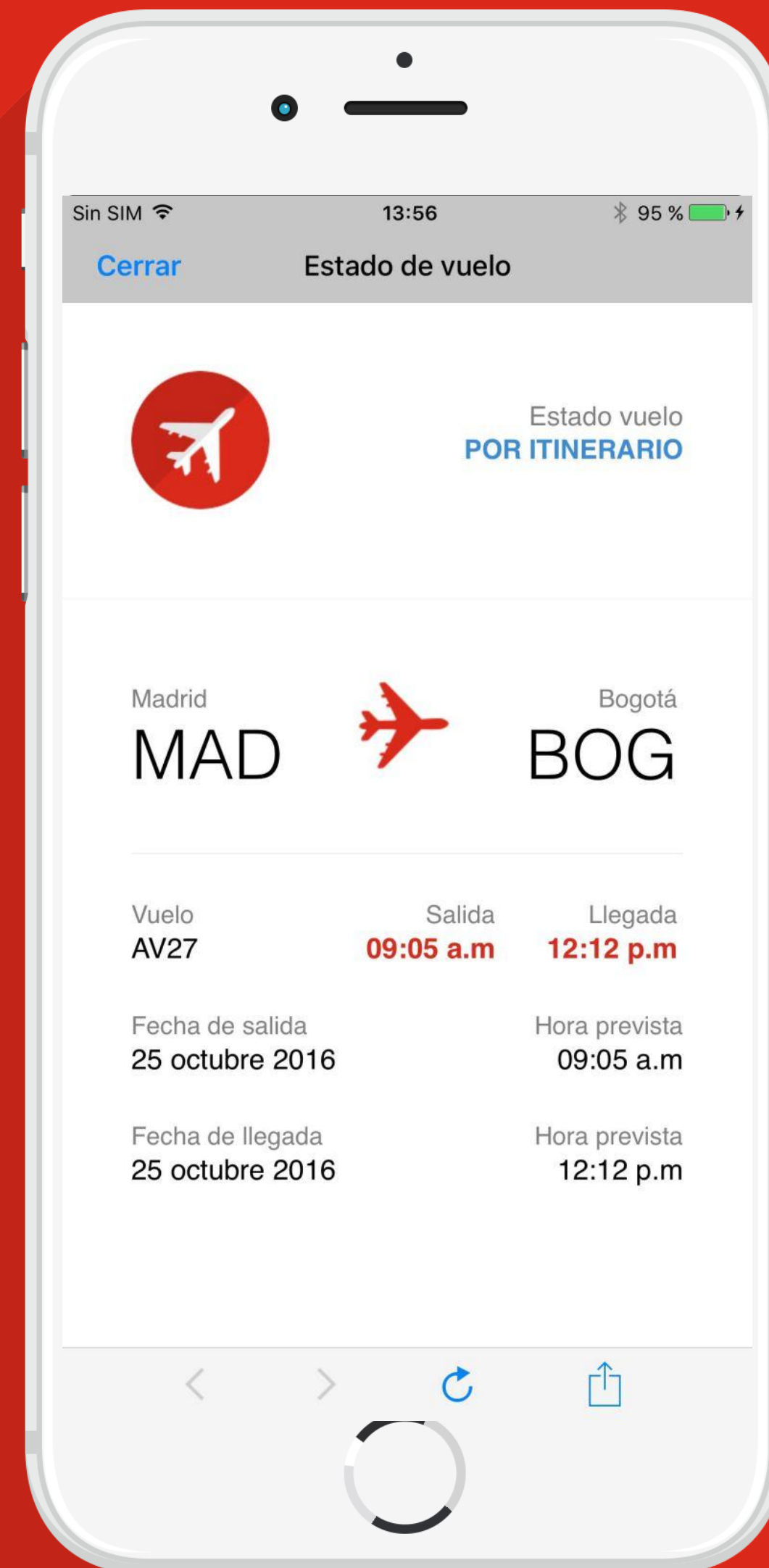
carla the ChatBot
facebook messenger

In order to improve the personalized assistance of its clients, this colombian airline wanted a new channel to offer their services, where travelers can make actions commonly performed before taking a flight, such as: check in, flight status, itinerary check, and others.

@MAS Spain, using the Facebook Messenger platform developed an innovative airline chatbot in record time as part of the quick wins of our client and as part of the partnership for their digital transformation.

The project was launched in December 2016 gaining 3,5K users in under a month. It was developed in only 6 weeks.

Third phase started on March 2017.

Sin SIM 13:56 95%
Cerrar Estado de vuelo

Estado vuelo
POR ITINERARIO

Madrid — Bogotá
MAD ✈ BOG

Vuelo — Salida — Llegada
AV27 — **09:05 a.m** — **12:12 p.m**

Fecha de salida — Hora prevista
25 octubre 2016 — 09:05 a.m

Fecha de llegada — Hora prevista
25 octubre 2016 — 12:12 p.m

Sin SIM 16:28 100%
Cerrar Selección de asientos

SELECCIÓN DE ASIENTOS

A B C D E K
7 8 9 10 11 12 14 15 16 17 18
A B C D E K
19 20

Guardar Selección

CHATBOTS & AI
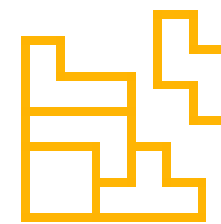
CARLA THE CHATBOT

#5

HOW TO GET STARTED

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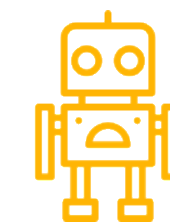
OUR THREE STEP APPROACH

1.- CHATBOT MVP

Develop service oriente ChatBot MVP to deploy first use cases that will have impact on customers, measure and iterate with findings.
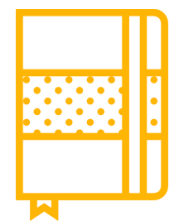
2.- INTELLIGENCE MODULES

Add modules to transform ChatBot into the first step of a Digital Assistant Platform.

3.- DIGITAL ASSISTANT TRANSFORMATION

Complete the transformation by integrated AI and automation process to impact both customers and dealers.

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BUILDING BLOCKS

1.- ASSESSMENT OR PLAYBOOK

Have access to Nestlé's digital playbook for digital channels or develop one through a digital assessment.

2.- WORKSHOP

Develop a hands on joint Design Thinking Workshop to define the vision, and design and implement a MVP ChatBot.

3.- MVP

Develop in a rapid agile way a MVP Chatbot that has direct impact with customer from day one, to validate and iterate this new channel.

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TIMING & BUDGETING GUIDES

POC (2 weeks)

Outcome: Build idea illustration scenarios with AI-NLP and dialog conversation for 1-2 use case.
Guideline scope boundaries
1 channel (e.g.: Facebook messenger)
Integration of 2-3 web services API
integration through dummy services
<10 steps conversation per use case

Pilot (4 weeks)

Outcome: Build a detail idea illustration of customer journey and technology proof point for 3-4 BOT use cases using AI-NLP and dialog conversation infrastructure.
Guideline scope boundaries
1Up to two channels (e.g. custom Android, IOS)
Backend integration to business application/data source (<6-10 web services /API integration)
<20 steps conversation per use case

MVP (6-8 weeks)

Outcome: Build business critical BOT scenarios which directly provides business outcomes and customer journey using detailed AI-NLP and intelligent dialog conversation for 6-7 BOT use cases.
Guideline scope boundaries
1Up to three channels (web, Android, FB etc.)
Backend integration to business application/data source (<15 web services /API integration)
<25 steps conversation per use case

Production ready

Outcome: BBuilt multi-channel, cognitive BOT scenarios to handle large volume and variations of actual live scenarios.
Guideline scope boundaries
To be estimated custom

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THANKS !

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