The Use of **Chatbots And Machine Learning** in the travel industry

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WHAT CEOS’ ARE SAYING

“The evolution of mobile, AI, voice search, and messaging chatbots could provide increased fragmentation today!”

MARK OKERSTROM
CEO — EXPEDIA
It will be less point-and-click websites. More and more, potential vacationers will now be helped by chatbots.

STEVE HAFNER
CEO – KAYAK
"That new system will never forget what your preferences are, will know you even better."

GLENN FOGEL
CEO – BOOKING HOLDINGS
CHATBOTS’ TIMELINE

MID-1960s
ELIZA & PARRY
Artificial conversational entities with natural-language processing

1990s
A.L.I.C.E. AND OTHERS
Possibility of self-learning, implementation of AI and more comprehensive natural language processing
Notable examples of such programs in the travel industry: Ask Jenn bot, developed for Alaska Airlines or Expedia's virtual customer service agent launched in 2011.

With the advent of Siri in 2011, it became clear that the chatbots are a part of our life now.

Using chatbots on these platforms turned out to be a matter of time.
About 30,000 bots in Messenger in a six months

Amazon opens access to Alexa API for developers to build custom Skills that extend Alexa functions

Google launches the platform for developers to create custom Actions and integrate new capabilities to the Google Assistant
CHATBOTS GLOBAL STATS

2018

Facebook Messenger: >300,000
Amazon Alexa Skills: >80,000
Google Assistant Actions: >4,200

2019
Both the market leaders and the startups develop their own chatbots.

Among popular chatbots: Expedia, Kayak, Skyscanner, Hipmunk, KLM, Booking Holdings, Snap Travel, Mezi and others.
92 MILLION

The millennial generation is the biggest in the US history – even bigger than the Baby Boomers.
The Generation Z is already on the doorstep. In just a few years, their market share can reach 40%!
MILLENNIAL TRAVEL HABITS

FACEBOOK
The most popular social network for traveling millennials
94%

MOBILE APPS
75% of millennials have travel applications on their phones
75%

TRAVEL INSPIRATION
Vast majority use Facebook for travel inspiration
87%

BOOKING
Almost half of millennials use phones or tablets to book trips
50%

SEARCHING
Using mobile devices for searching travel information
74%

MESSAGING PLATFORMS
45% regularly use messaging platforms and chat rooms
45%

CruiseBe

Internet Marketing Inc.
THE USE OF MESSAGING PLATFORMS IN THE USA

MILLENNIALS

41 mln

GENERATION X

19 mln

BABY BOOMERS

7.5 mln

TOTAL

>67.5 mln

Potential users of chatbots
CHATBOTS COULD BE

- Customer Support
- Traffic channel
- Marketing channel
- Sales channel
CHATBOTS TYPES

Pre-built
Special online services and platforms

Command-based
Commands and cards to retrieve specific data

Code-based
AI, NLP (text recognition, speech recognition)

AI with ML
ML algorithms for NLP improvement
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PRE-BUILT CHATBOTS

Chatbots created by using special online services and platforms. This solution does not require any additional engineering & coding work.
Building such bot requires programming knowledge. Company needs to have a team of software engineers, additional resources and certain timeframe for developing the bot.
CODE-BASED CONVERSATIONAL CHATBOTS

Conversational chatbots have more extensive opportunity to interact with the user, they have text and speech recognition and can have a complex natural dialogue with a person, including voice-enabled devices.
CRUISEBE CHATBOT

Search & Explore
Providing information about ships and ports

Itinerary planner
Instant aggregation of the cruise daily agenda

Games & quizzes
Playing simple games with a user

Text recognition
Complex natural dialog with a user

Speech recognition
Voice-enabled assistant

Select & Book
Real-time booking process (*in development)
CHATBOTS BENEFITS & RISKS

- Instant replies
- Pre-configured funnel
- 24/7 availability

VS

- Non-acceptance
- Subscription settings
- Machine learning control
AI CHATBOTS WITH ML

ML allows a bot to self-learn while communicating with the user, remember the response, and improve its skills in the following interactions.
TRAVELERS’ “AVATARS”

AI will identify the tourist and classify him/her to the appropriate user “avatar” class with ten thousands of people with similar preferences. The program will be able to anticipate user`s wishes based on the experience of the "avatar" which combines the behavioral factors of the whole group.
Chatbots will replace the traditional call centers, booking-engines and, in some way, communication with customers. Moreover, chatbots will be visualized in the form of a travel agent or excursion guide using AR, VR, and AI.