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Adopting the power of conversational UX Chatbots

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Discover more about financial services technologies, including chatbots, at **Deloitte.co.uk/FS**

Executive summary

We find ourselves at the forefront of a new customer-centric way to engage with businesses. Now, through chatbots, companies are able to provide instant, tailored, two-way conversations at scale – all through natural human language.

Mobile apps force customers to engage with brands through predetermined paths, and require individual downloading and new learning, increasingly leading towards app-fatigue. The rise of messenger platforms (such as Facebook or Slack) and significant improvement in technologies – from Natural Language Processing (NLP) to Artificial Intelligence (AI), to Machine Learning (ML) – have allowed customers to express their needs directly through the same familiar channel, accessed by messaging or voice.

We're still in the early days of conversational interfaces. However, customers increasingly demand access to information at any time and day, and digital-core companies have started responding and innovating at a rapid pace. To succeed, it will be crucial to:

- **Understand the market**. Keep informed about conversational UX and understand the benefits and challenges it can provide to your business.
- **Build a MVP**. Determine a specific, clearly articulated objective, and decide what services to offer.
- Iterate. Best practices are only emerging, and AI and ML requires continuous learning and iteration in order to be effective.

Chatbots are a complementary layer of your holistic customer experience, and overall should delight users. Don't build for the sake of building, but understand the opportunity: one of offering a novel experience, which cannot be delivered by other means of digital consumer engagement.





Organisations are rapidly leveraging artificial intelligence to dramatically change the way they interact with customers.

"We think that you should just be able to message a business in the same way you message a friend. You should get a quick response. And it shouldn't take your full attention like a phone call would. And you shouldn't have to install a new app."

Mark Zuckerberg, 2016

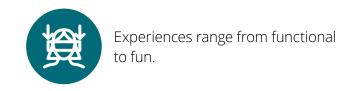
What is a chatbot? (1/2)

Conversational experiences use artificial intelligence and natural language processing to mimic conversations with real people in both written and voice formats.

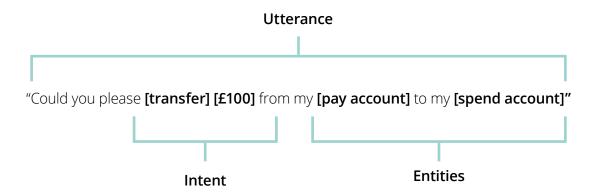


Advanced software learns from past interactions, improving responses over time.





The first challenge is identifying and understanding the underlying intent in a human phrase, by extracting key elements:



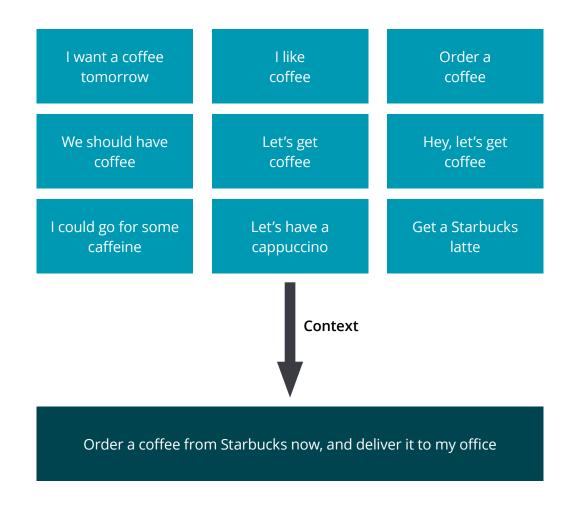
What is a chatbot? (2/2)

Conversational experiences use artificial intelligence and natural language processing to mimic conversations with real people in both written and voice format.

The second challenge is the technology's ability to recognise an almost infinite number of ways of ask for the same intent. Understanding such intent depends heavily on Natural Language Processing (NLP), and requires relevant context in order to provide accurate results or services.

Simple phrases such as "Let's get a coffee" could mean many things without context.





Types of chatbots



Informational

Informational chatbots are the simplest type and usually involves providing general information such as FAQs, news stories and push notifications.



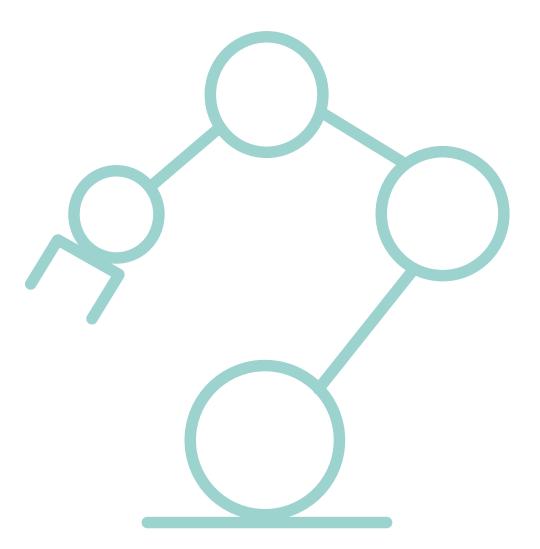
Transactional

Transactional chatbots allow users to complete transactions and interact (such as booking a hotel). Typically they require a user to be authenticated into their user account.



Advisory

Self-learning chatbots are the next evolution in chatbots, able to learn based on customer interactions to determine the appropriate next steps.



Chatbot benefits

Chatbots are data driven, scalable and enable a richer customer experience.



User engagement

Customers are increasingly demanding instant forms of communication – messaging apps and social media have replaced emails and phone calls.

A chatbot bridges this communication gap between you and your customers.



24/7 and scalable

Chatbots enable you to service your customers throughout the day. They are a trusted and reliable employee, always available and accurate.

Once you have designed and built your conversational experience, a chatbot will perform the task it has been built to do, 24/7.



Intelligence advantage

Chatbots enable a deeper understanding of how customers speak, meaning you are able to better respond to their needs.

Integrating chatbot 'intelligence' within an experience also creates a more robust business model that is difficult for competitors to replicate.

A growing market







Greater availability

Over 100,000 chatbots on Facebook Messenger (April 2017) from 33,000 6 months before.

67% of industry professionals believe that chatbots will outperform mobile apps in the next 5 years.

Increased efficiencies

Predictions that bots will save businesses \$8 billion per year by 2022.

Healthcare and banking providers using bots could see time savings of over four minutes per enquiry, equiv. \$0.50-\$0.70 per interaction.

Customer adoption

By 2022, we'll be talking to bots more often than we talk to our own spouses.

By 2018 over 2 billion people, or 80% of all smartphone users, will use mobile messaging apps.

Adoption of chatbots

The bot phenomenon will cause broad disruption in many areas of the economy. Examples include:



Banking

Check your balance, set financial goals, gain spending insights, transfer money, pay friends and bills.



Gastronomy

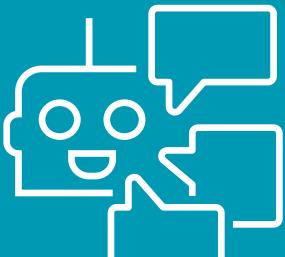
Browse menus, view recommendations and reviews, align with one's nutrition diet, order and pay.



E-Commerce

Get personalised offers and deals, ask about fashion trends, shop a directory, order and pay directly.

Despite their popularity, it isn't as easy as it seems to create a truly valuable chatbot. You need to design an experience that provides value both to the customer and business.

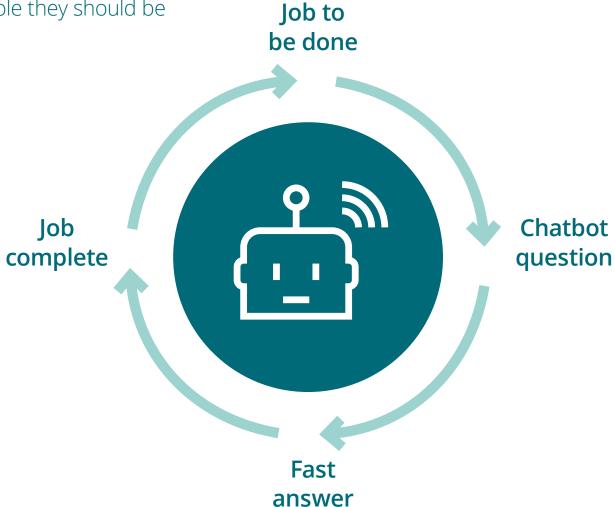


Do you need a bot for that?

Businesses can be easily swept up in the hype and miss the realities of how chatbots work and what role they should be playing in customers' lives.

Customers are not as excited by the technology as you. Brands that build their bots around completing the jobs customers bring to them will be the most successful.

Solve customer problems quickly – customers don't want to 'chat'. Ensure to focus on simple use cases (like FedEx tracking a package). Then build more complex scenarios through continuous learning of what works and what customers desire, and as AI enables new use cases.

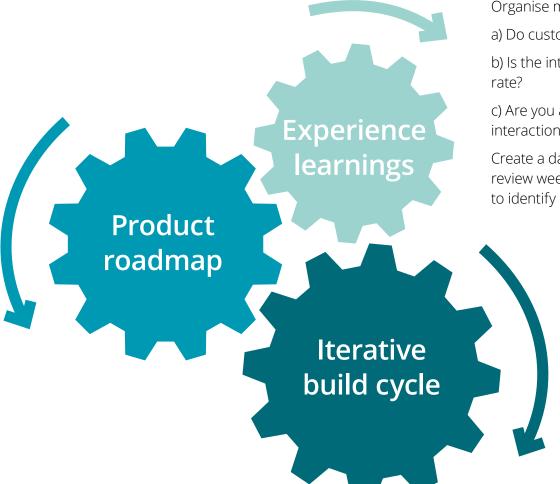


Embedded learnings

Ensure you are able to generate learnings from day one.

Identify target segment customer needs and a set of chatbot features which solve this need.

Define specific user stories to build and a set of metrics to measure their performance and impact.



Organise metrics around three key areas:

- a) Do customers like the experience?
- b) Is the intelligence improving and at what rate?
- c) Are you able to effectively operationalise interactions resulting from the experience?

Create a dashboard, measure daily and review weekly with the core experience team to identify relevant changes.

Use an iterative approach to build the chatbot experience and ensure you are able to adapt the experience in the moment.

Three pillars to create a winning chatbot



Work with, not against humans

Businesses have latched onto the idea of AI service as a way to reduce headcount and cost. The real value of chatbots is the ability to enhance the overall customer experience.



Intelligence cannot be codified

Pundits believe that AI is so sophisticated today that it can hold its own from day one. This hype is not reflected in reality. Treat your chat as an infant, it needs support to develop.



Give your chatbot a personality

Giving a bot a personality helps the user to connect on an emotional level. It should also have a have an intuitive UI, based on benchmarks set by other interfaces, e.g. FB Messenger

Who are you designing for?

Brands are designing their customer journeys around a single persona, unconsciously excluding those that don't fit. Chatbot users are not the same, consider the five key types.



Chatterbox:

Loves exploring the bot's ability to respond to any questions. Brands must ensure to remove dead-ends and keep them engaged.



Enthusiast:

Will try to break the bot in any way possible. Brands should test thoroughly with these power users, and act on their feedback.



Sceptic:

Treats chatbot technology with scepticism, so brands need to determine a specific use case and execute it well to prove them wrong.



Joker:

Tries to find hidden gems. So brands should try to integrate 'Easter eggs' for users to find and be entertained by.



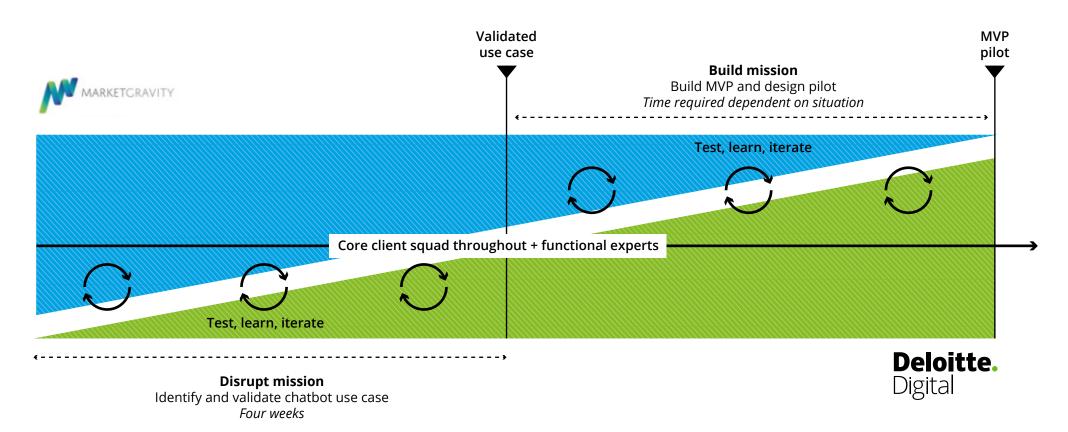
Problem child:

Chatbots will have a limit, no matter the number of use cases. So brands need to always ensure to have a fall-back option of a real human being providing customer support.

Our proven four week approach enables greater confidence to rapidly design, test and iterate your chatbot experience with customers before committing time and resources to build.

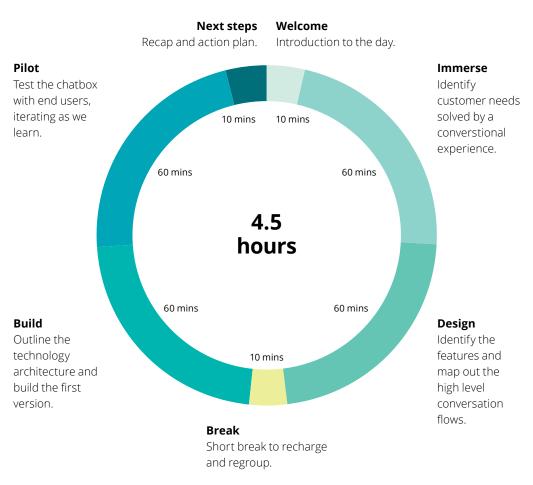
Test, learn, iterate...repeat

A rapid process to define, validate, and test your chatbot use cases, before building and piloting your MVP chatbot experience.



Conversational experience workshop

An immersive half day workshop to explore the full conversational experience launch journey, from insight to design, and build to generated learnings.



Outcomes

- Clear understanding of the end-to-end journey and an MVP chatbot
- An approach to design a conversational experience based on customer needs
- An overview of technology options and architecture requirements
- Familiarity with how to generate learnings and train the bot
- Clarity with team / skills requirements
- Next steps and action plan

Chatbot Blueprint

Our 'Chatbot Blueprint' ensures all building blocks are addressed.

1. Purpose: what is the objective of creating a conversational experience for your business?

2. Customer

What job does the user want to complete?

Who are we building the experience for?

What is need / frustration is being met?

What are the tasks that will deliver against the need?

3. Relevant content

What content is needed to complete the user's objective?

What is the information you need to surface in the conversation?

How will you access the information?

How will you organise and display the information?

4. Navigation

How will the user interact with and navigate the experience?

How will the design enable a useable experience?

What intent(s) does your experience enable?

What are the conversation flows that fulfil each intent?

5. Business fit

How does the conversational experience fit in with everyday business?

How will the experience support the business's objectives?

How will it support existing human services?

What personality and language will you use and does it fit with the business?

6. Learning

How will the bot improve, learn and evolve over time?

How will you drive usage over time?

How will you generate customer learnings?

How will you improve the accuracy of the bot?

What are the stage gates to full launch?

7. Enablers:

What are the skills and roles needed to deliver the experience?

What is the time and budget commitment required?

What are the support tools needed to deliver the experience?

Appendix

Searching for a digital role

Avnet is a global leader in electronics distribution, #108 in the Fortune 500, with \$26bn turnover.

Market Gravity helped Avnet to design and launch a new proposition that enables a deeper conversation with customers, and defined a digital strategy that tied together all of their brands.

Based in Phoenix, Arizona, the company works with the largest technology manufacturers in the world (e.g. Apple and Intel), helping them to design new products, prototype new solutions, and procure the components required to manufacture them at scale.

Over decades of growth Avnet has accumulated a wealth of engineering and supply chain expertise. Today it is in a period of transformation: competition for customer attention is intensifying: hardware manufacturers are exploring direct to customer channels, and distribution monoliths like Amazon are muscling into Avnet's patch.

Avnet believes it is unmatched in the support it can offer to all customers and build stages, from large corporates to solo entrepreneurs, from early design to fulfilment at scale.

They have recently acquired several businesses to complete their offering, and now needs to tie them together and articulate the benefits of the entire ecosystem of services to its customers. Our challenge was to to design a new digital proposition that created a deeper more valuable customer engagement.







Enabling better conversations

Designing, building and launching a disruptive AI-enabled proposition.

Over multiple phases, Market Gravity helped Avnet design and launch a new digital experience that changes the way customers interact with the business.

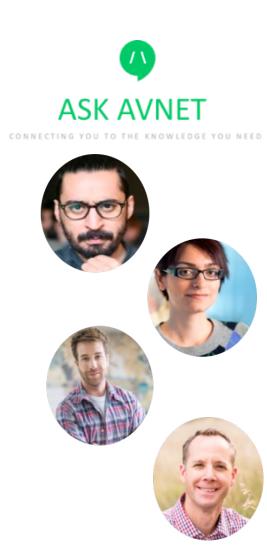
We uncovered deep customer insights around makers and engineers in Europe and the USA, to understand their current design and prototype experience, and identify gaps. A clear role for Avnet emerged to connect engineers to the insight, resources and expertise they need, which today is spread across a wide range of locations.

We articulated 10+ concepts that addressed these needs in different ways, ultimately prioritising Ask Avnet, a digital assistant which can answer many everyday questions instantly, or connect to a real person when things get complicated.

Ask Avnet uses artificial intelligence to surface parts and related content from across the Avnet ecosystem, as well as integrating human expertise as part of the experience, providing customers with a single interface to communicate directly with Avnet.

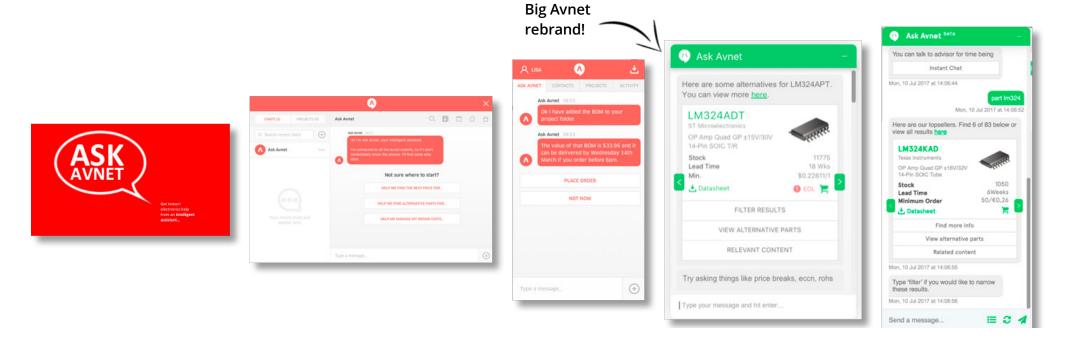
After designing the proposition and testing a prototype, we established and ran a small multi-disciplinary 'pilot team' to deliver the detailed chatbot experience: mapping out the conversation tree, building the chatbot and mobilising operations.

Ask Avnet is currently in pilot with c. 300 users.



Evolution of ask Avnet

Over seven months, we articulated the concept, then designed, built and launched the MVP.



Initial Ask Avnet concept

Concept scenario and prototype

Detailed customer journey prototype

Detailed UX/UI design for build

Iterated MVP

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