White paper

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Customer Engagement

Chatbots: Conversation for all of us

By Paul Greenberg
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Answering questions from customers and taking actions on their behalf is part of business's life blood and a key driver for engagement. Getting it done effectively—meaning accurately and quickly—is one of the key factors in retaining your customers, even as their demands increase and the kind of experience you provide becomes more and more of a differentiator. The use of chatbots, especially when you are dealing with customers by the thousands and maybe millions, becomes an important part of your offering.

In this whitepaper, I provide you with the Chatbot basics:

- Definitions you need
- Examples of success
- Mainstream use cases
- Current and future value

You'll see why Chatbots are becoming the must-have for effective Customer Engagement.

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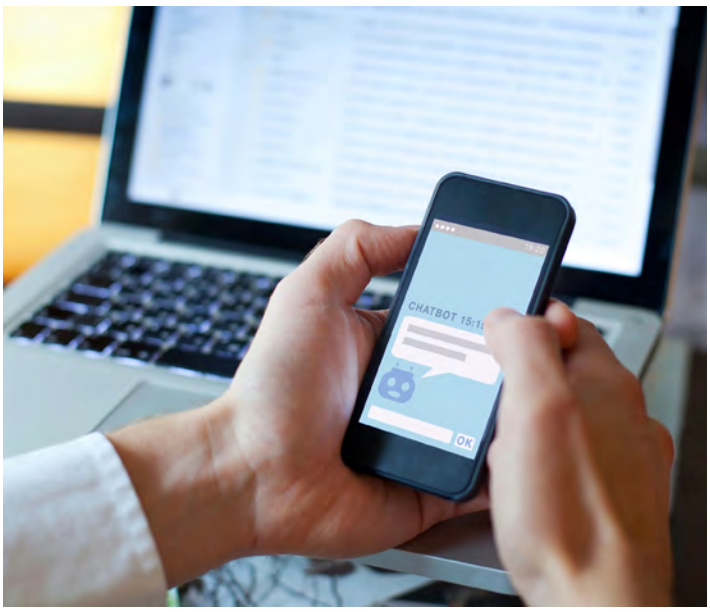
"The use of chatbots, especially when you are dealing with customers by the thousands and maybe millions, becomes an important part of your offering, your strategy."

I'm guessing whether you know it or not, you've interacted with a chatbot at some point. There's reasonable chance that if you had a customer service question and you used the virtual assistant or the less obvious chat window that it wasn't a human that you were talking to. But, you asked your question, it/he/she asked you something back to get a better sense of what you wanted, and it/he/she then responded. So, you got want you were looking for, right? The answer to your question.

The answer to your question might have come from an actual human being. But possibly not. It may have come from a chatbot too. Likely it will be that you didn't care because all you truly cared about was a satisfactory answer to the question you asked. You got it and you moved on.

As bland a process as that might sound, it isn't. Answering questions from customers and taking actions on their behalf is part of business's life blood and a key driver for engagement. Getting it done effectively—meaning accurately and quickly—is one of the key factors in retaining your customers, even as their demands increase and the kind of experience you provide, becomes more and more of a differentiator. The use of chatbots, especially when you are dealing with customers by the thousands and maybe millions, becomes an important part of your offering, your strategy, the experience that the customers have over time with you and the level of engagement between you and each of them.

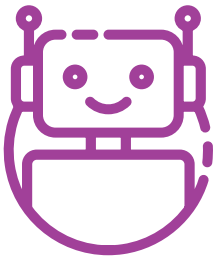


So, there is significant business value in the use of chatbots, but like any other technology coming on the scene, there are right and wrong ways to utilise it—and there are risks in doing it at all and rewards for doing it effectively.

In the next several pages, I'm going to describe why chatbots, what a chatbot is, and what the business value is, with some examples and use cases.

In other words, the basics, so you can start from somewhere when it comes to deciding on what to do about chatbots.

So, take a seat, eyes on the page and let's get this show on the road.



Why even talk about Chatbots?

Fifteen years ago, we didn't communicate the way that we communicate now. We didn't focus on our mobile devices to the obsessive point that laws had to be passed to prevent texting while driving. If someone said, "chatbot" to us, we'd "chat but what?" because we didn't have any idea what a chatbot was even though there have been chatbots of one form or another around since the 1960s. WeChat, the ubiquitous messaging platform based in China didn't even exist yet now has over 1 billion users monthly as of March 2018. Facebook, 2 billion members, same thing. A "tweet" was a bird sound. Nor would or could it even be imagined that we'd have 2.3 billion smartphone users in the world by the end of 2017. Email was the transmission belt, phones weren't bad things, and social communications meant standing outside of your house in your neighbourhood talking to a neighbour.

But we had a communications revolution that irrevocably transformed how we communicate, with whom we communicate, what we use to communicate, what we expect of the communication, the speed we communicate, and the means and methods we use to communicate. In addition, it changed how we create, distribute and consume information, forever.

Even though this had an impact that goes far beyond just business, the impact on business was profound. Suddenly, social channels became an active avenue for conversations with one to many people in real time and the response was immediate. In fact, in 2009, two studies, one from Morgan Stanley and the other from Nielsen, found that for the first time in history, more people were communicating via social media than email. Was that true? Not really. I saw 10 plus studies that said more were still communicating via email. But what it did tell you is that the volume and velocity of social communication was so great that these two anomalous results could appear. If not the dominant form of communications, social media was now a force to be reckoned with. It also was a case in point that showed that a real time or near real time response via those channels from either peers and/or institutions was a real possibility.

This deeply affected what customers expected of businesses. As far as they were concerned, businesses should respond in real time to them as individuals, because they could. Plus, the customers wanted to feel valued by the businesses. The rise of Amazon and ecommerce made it possible to get the products and services from a far wider array of vendors than in the past and in a convenient way, thanks to the proliferation of

delivery services that allowed overnight or second-day delivery without ever going to the store to get what you ordered. Customers expected more than just the products and service. They expected personalised service and services. They expected real time (or nearly so) response with individually useful information.

Yet, the problem businesses have is that they have up to millions of customers and those millions of customers are individually expecting that real time, or nearly so, response—and with information that is specifically relevant to each of them. Plus, they want to receive that information in a way that is convenient for them—and that, often, is walking down the street with their mobile device in hand.

How do the businesses deal with this demanding customer—the one who wants personalised responsive interactions in a way that is both convenient and timely when it has to be provided for what is potentially millions of interactions per day?

While there are clearly many possible approaches to dealing with that, for the purposes of this white paper, enter chatbots. They can scale, respond conveniently and with information useful to individual customers—all without human intervention, except when necessary.

"...We had a communications revolution that irrevocably transformed how we communicate, with whom we communicate, what we use to communicate, what we expect of the communication, the speed we communicate, and the means and methods we use to communicate."

Social today

WeChat

1 billion
users monthly

- March 2018

Facebook

2 billion
members

- March 2018

Smartphones

2.3 billion
users worldwide

- December 2017

What is a Chatbot?

Much as you might think they are, chatbots are not new. In fact, you could make a case that the first chatbot was called Ella and was created in 1966—which means they are older than most of you reading this. Ella was a rules-based chatbot that mimicked human speech by matching user prompts to scripted responses. It was even able to pass the Turing Test. (Named after Alan Turing, widely considered
to be the father of Artificial Intelligence, passing this test meant that the 'bot could fool a user into thinking it was a real human).

By 1988, there was even an attempt (failed) to create an AI-based chatbot called Jabberwacky.

But despite the very limited success of AI-based chatbots in the earlier days, by 2005, the evolution of natural language processing and artificial intelligence were sufficient to create an award-winning chatbot called Mitsuku. Mitsuku's sole purpose was to interact with users and pass the Turing Test, which it managed to do with dialog like this:

Mitsuku: hi

User: What's going on?

Mitsuku: Nothing much, you?

User: Great

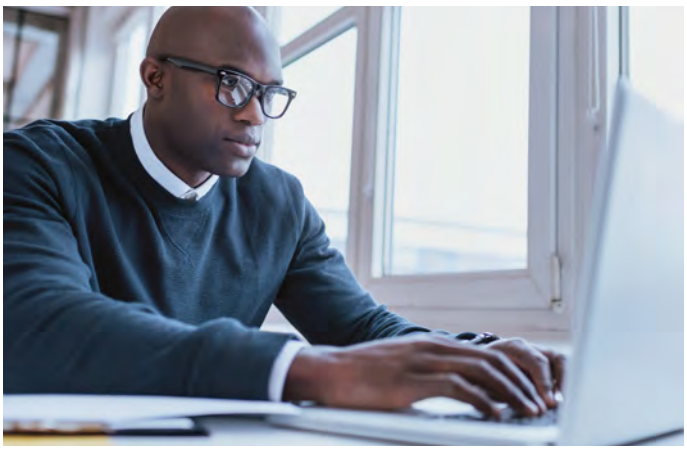
Mitsuku: Glad to hear it. Can I help you with something?

User: I want to book a bus

Mitsuku: You should contact the bus company then.

User: Can't you do it for me? Please?

Mitsuku: No, because I don't know where you want to go or when or what your credit card details are.



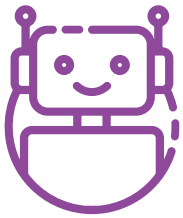
While chatbots are nothing new, their use en masse and the recognition of their value beyond entertainment and in business is new. Much like AI, the context for their use is now here as customers have become more demanding and the presence online of those customers more ubiquitous.

So, what is a chatbot then?

Most definitions of chatbot will identify it as a "program" and "driven by artificial intelligence." Neither of these is strictly true, though they aren't entirely wrong. The best definition I've run across (I'm not defining it myself) is the one that accurately defines its current state of the art. It is from Chatbot Magazine (chatbotmagazine.com):

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

This is deeply unsexy, but it is to the point.



What do chatbots need to be able to do?

Paul White, the director of customer engagement at MPL Systems, interviewed for an article by the always-amazing Neil Davey, editor-in-chief of MyCustomer.com (January 2018) laid out the barebones for what that service has to be able to do:

"The basic offering of a chatbot is to answer FAQs. Considered to be the bread and butter functionality of the software, it is imperative that your chatbot is able to search and filter through your data in order to be able to provide popular simple answers.

Is it worth starting with a narrower coverage for the chatbot, identifying the most popular questions and allowing it to answer those, while routing more complex and irregular requests to agents. If this is a route that you decide to begin with, it is important to offer other self-service options so that you can collect data and use it to learn from and further develop your chatbot.

To be able to go one step further, by processing change requests from the customer, would positively affect your agents at the service desk significantly.

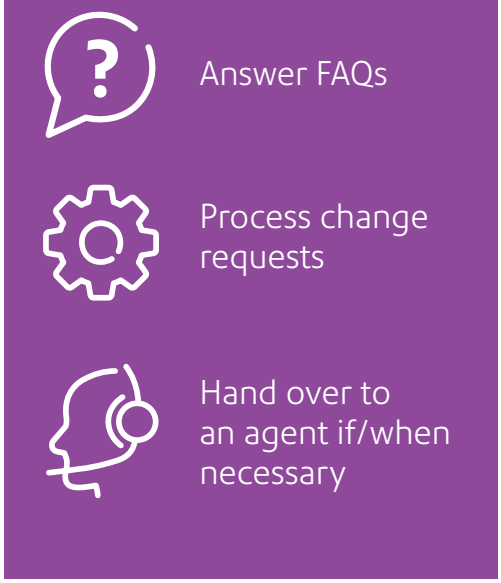
For example, should they wish to change their address on their account, change details on a submitted insurance form or upgrade their membership status, the chatbot would be able to acknowledge, understand and process this request. All without disrupting the agent's workflow, who might be completing a more complicated task at the time.

Finally, in order to provide a seamless customer journey, it is important for your chatbot to be able to hand over to an agent when/if necessary. If the customer has entered text that the system does not recognise, or has a more complex query, being able to hand off to an agent, with all previous chat history, is essential to providing a smooth experience whereby the customer needn't repeat any information already disclosed."

As simple as these steps seem, they require a lot of thinking, planning, expenditure and effort to deploy them effectively. And, they don't always work. The Facebook Messengers chatbot failure rate—meaning its inability to answer a question correctly—is a widely reported 70 percent. If you are thinking baseball, .300 is a pretty good batting average. But a successful interaction with customers only 30 percent of the time, means that 70 percent of those customers have had a failure. Not good at all.

If the deployment of a chatbot has that high a risk of failure, why would you do it?

The role of the chatbot.



Why Deploy Chatbots at All?

People in all 195 countries communicate via chat—either human or bot—and they are people of all socio-economic statuses.

Chat, via any type of conversational interface such as a voice interface, a virtual agent or some other messaging platform or application, is becoming a ubiquitous communications medium. It is simply part of the landscape of how we communicate with businesses. Drift, in their 2018 State of Chatbots Report, found that people in all 195 countries communicate via chat—either human or bot—and they are people of all socio-economic statuses. In fact, in another report sponsored by Oracle in 2017, they found that 80 percent of all the businesses they interviewed said they would be deploying chatbots by 2020. This isn't surprising. Chatbots both scale and provide what the customers are looking for—answers—in a way that human beings find convenient.

To be clear, I'm not using "convenience" lightly. Convenience is arguably the greatest driver of a long term excellent customer experience with a company. It is what we look for when we interact or transact. Think about it. When you are buying something on Amazon, you are probably doing so because a. the price is good; b. it's convenient to find something regardless of which kind of retail product it is; c. it is convenient to order the product; and the delivery is, say it with me, convenient, because it comes to your door. This is a likely frictionless transaction from end to end. The reason you pay $119.00 a year for Amazon Prime (in the USA as an example) is because of the convenience from sale to final delivery that it provides. Not only is an ongoing cost (delivery charges) removed, but the process by reducing the steps to delivery is more convenient. The least effort is the most convenient and Amazon has mastered that.

Chatbots are also convenient. First, because the customer makes the choice/decision as to when they want to interact. They don't have to wait to synchronize schedules with a person. The chatbot is always available. Second, if it works, there is little extraneous noise in the course of the interaction. The customer asks the question, the question is answered. The most fundamental utilitarian approach, but since the outcome the customer is looking for is the answer to the question, it does it in the most effective way—when the customer wants it and with no upsell or cross sell or other interfering noise.

Chatbot's value for the customers is becoming clearer each day, but chatbots are still not ubiquitous. Drift's report shows that 38 percent of the respondents used chat functions to communicate with customer service in 2017; an additional 15 percent used chatbots specifically. While that's not a giant amount relative to say email or even phone, it shows progress and adoption.

But those things that the chatbots are designed to resolve are top of mind to customers, and thus, given that adoption is progressively growing, show great promise for chatbots. For example, in the Drift report, the second most frequent complaint that the respondents had when it came to online experience was getting answers to simple questions (31 percent). What makes this a particularly relevant data point is the top reasons people see the value in the use of chatbots.

Top three reasons people see value in the use of chatbots

01. Getting a quick answer in an emergency

37%

02. Resolving a complaint or problem

35%

03. Getting detailed answers or explanations

35%

Some of the actions that chatbots can take	
Sales	Help customers choose products to purchase, after the bots qualify their preferences and in more advanced cases, also using the historical data about prior purchases in the customer's record.
Marketing	Offer lifestyle recommendations e.g. specific uses of a food product in a recommended recipe based on the other ingredients that the customer has handy. This is content driven marketing. This can drive leads and, hopefully, sales.
Customer Service	Get the answer to a customer service query based on the interactions with the customer. This can also mean the chatbot being able to identify when it is necessary to escalate the query to a human being.

Chatbot convenience and scalability leads to supporting a long term great customer experience and can provide a significant engagement benefit. Think about it. If you have customers who want to come back again and again to communicate with you in some way and the medium facilitates not just the communication but the interest in continuing the communication, then you have something that fosters loyalty. In late 2016, when chatbots were beginning to emerge into the mainstream, Similarweb did a study on US user retention rates comparing popular apps to chatbots. The concept was based on what percentage of users were still using the apps/chatbots up to 30 days after install, meaning when the honeymoon with the app or the bot was over. You know as well as I do that most of us get bored with the apps we download, and we stop "playing" with them long before a month is up. This study considered the leading entertainment, music and news apps and, chatbots. Music apps, thirty days after install had the highest retention rates among all apps with a little over 40 percent. Chatbots? Sixty plus percent. By FAR, the highest level of retention.

The engagement level is as high as it is because chatbots can not only provide the answer to a question that a customer has, but at the same time, can, when integrated with customer data, personalise the interactions with that customer. Plus, the chatbot is, for better or worse, trying to communicate with the user in a natural, personal way. While I'm not going to spend much time on the "humanisation" of chatbots in this document, the advances are substantial enough to reach the point, during a somewhat frustrating customer service problem, I wasn't sure whether I was communicating with an actual person or a chatbot. The problem I had, which was that the person/chatbot I was interacting with repeated phrases and didn't directly answer the questions I was asking, was indicative of the state of many chatbots—meaning repetitive behaviours when none was called for and an inability to answer the question. On the other hand, it showed you that the chatbots generally had advanced enough in their natural language skills to be considered possibly human. Sadly, it turned out it was an actual human.

The engagement value for your business is the dedication to your company it fosters—and thus the future transactions with the company. But the question remains, is there a more immediate and more direct benefit.

There is. Cost savings—and the numbers aren't trivial. Juniper Research in their 2017 report "Chatbots: Retail, eCommerce, Banking & Healthcare 2017-2022" estimate that in those industries alone, chatbots can drive more than $8 billion in savings by the year 2022.

It's estimated that chatbots can drive more than $8 billion in savings by the year 2022 for Retail, eCommerce, Banking and Healthcare alone.

(Juniper Research, 2017)

The data is there and the interest in chatbots is very high. But there is more than one kind of chatbot and, despite all the chatter around artificial intelligence and machine learning, it isn't totally obvious as to which kind of chatbots you want to build and deploy and why you should.

Chatbot State of the Art

Categorically, there are two "types" of chatbots. One is rules-driven and the other is driven by machine learning and artificial intelligence (though rules play a big part in these, too). They roughly mirror the state of enterprise technology with the two categories being akin to the difference between artificial intelligence and robotic process automation (RPA). Artificial intelligence for chatbots is the use of algorithms to continually learn from the behaviours of the customers that are communicating with the interfaces and then optimise the customers future personalised interactions accordingly, via one to one (bot to human) bidirectional interactions. RPA is the ability to use technology to automate continual and repetitive tasks via a rules engine that is consistently optimising the processes. Rules-based chatbots work similarly. They are based on guided or structured approaches that are baked into a rules engine that can address a query or carry out a task.

One of the key differences between a rules-based chatbot and an AI-based chatbot: a rules-based chatbot makes no assumptions; an AI-based chatbot does. A rules-based chatbot simply answers the queries that is it is asked and "has pre-configured answers to handle that. After the answer is given, case closed. An AI-chatbot learns from the responses it gets to the answers it gives. Using machine learning, it learns by remaining open-ended even after it provides an answer.

Each has value; each has a purpose. I won't dwell on them here. Just keep reading.

Rules-Driven Chatbots
Deterministic / Guided / Structured

While most of the new conversation around chatbots is about artificial intelligence and machine learning, most chatbots that are currently in use are rules-driven chatbots, also called guided chatbots, deterministic chatbots or structured chatbots. Essentially these are bots that respond to questions that most often have or require a fixed answer. For example, the UPS chatbot can respond to:

What are your rates ground shipping of a 1.5-pound package from Washington D.C. to Nashville?

The simplest answer would be the cost to ship the package. However, to actually figure out the price—the chatbot would need more specific address information so it might ask:

What is your address in Washington D.C.?

Is that Nashville Tennessee?

If yes,

Where in Nashville TN are you sending it?

How do you want it shipped? These are your options...

That might seem to be a more complex effort, but it is still well within the bounds of a structured answer and it isn't providing anything that isn't already accounted for. It is essentially asking the questions it needs to complete the pre-programmed task—i.e. calculation of a price.

Rules-based chatbots are designed so that for each pattern or condition that it can identify there is an action to be taken. The simpler rules engine can either respond to something that it reads and respond with something that has specific applicability to what it read. The more advanced models take sentiment into account and respond according to the specific inquiry or interaction and the emotion it detects—again, rules-based detection:

"If (this word) is used then he or she is fearful... angry... upset... happy."

Then the chatbot monitors the subsequent conversation/interactions to see if the level of fear, anger or happiness rises and falls according to what patterns it finds in the conversations. The rules engine then determines the action to be taken based on the query and the emotional response that it identifies:

"If the fear reaches (this level) then suggest/say the following."

To be able to analyse this, despite different uses of a language (e.g. slang, dialect), rules based chatbots use Natural Language Processing (NLP) and Natural Language Understanding (NLU). Developers can use functional languages such (e.g. Java) to create decision-trees or algorithms that lead the user through a predefined conversation path. But as you can imagine, the path is still predefined. NLP is used to identify words or phrases and match them to similar ones that lead to the same answer no matter what way the question is phrased. NLU is used to define the phrase/word maps (ontologies) that help the chatbot understand intent.

Rules-Based Chatbot Benefits

If speed, deployment ease, and cost are a consideration and the purpose is highly targeted or relatively simple inputs, then rules-based chatbots might be the way to go.

Rules-based chatbots are considerably faster to create, easier to implement and a lot less costly to build and, as do the AI-driven chatbots, they scale. In a July 27, 2017 Medium article, author Hristo Borisov, Director of Product Management at Progress, estimated that a rules-based chatbot with everything (general development, integrations with systems including CRM, and a customer-friendly UI) included, would cost a bit over $35,000. I've seen multiple estimates that run between that as a low end to upwards of nearly $100,000 for a more complex chatbot, still considerably, nay substantially, less expensive than an AI-driven chatbot.

Plus, the single most important facet—sometimes the customers queries and interactions don't require artificial intelligence—they require answers to questions that are typically functional e.g. how to follow an established process of one kind or another or get some information that requires some normal level of calculation. Typically, they don't require high degrees of interaction.

For example, KLM makes extensive use of chatbots that are either rules-based or require only a small amount of machine learning. Its central 'bot is BlueBot (BB) which in its simplest form, is a virtual flight booking agent. They run it through Facebook Messenger, which is a very popular messaging platform. You can book the flight, get your confirmation, check in, get notification, request boarding passes and even ask simple queries (e.g. What's the weather like in Amsterdam?)

They don't limit it to just Facebook though. There is a chatbot for Google Home and a version of BB built as a microservice on the WeChat messaging platform, delivered via WeChat's app. The API for BlueBot feeds into the KLM CRM system and thus it is able to check against the data available on the individual customer who is interacting with the 'bot. Thus, a high value customer can be identified and the level of the query (e.g. a simple problem, a major issue, a simple query) flagged, allowing the customer service staff to respond as required.

However, the limitations of rules -based chatbots limit the responses it can give and the level of complexity that the chatbot can handle. This is where artificial intelligence-driven chatbots (AI chatbots) come in.

Imagine a customer service chatbot.

In this example, the typical intent of the customer is:

"I have a problem; I need you to solve it" or **"I want to return something; how do I do that?"**

For the problem, the chatbot might have the ability to understand the customer's input when its stated as:

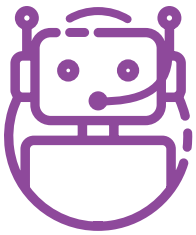
"This needs to be fixed" or **"I have a complaint"** or **"This is broken."**

For returning something, the customer's intent may be voiced as:

"I want my money back" or **"I need to exchange this."**

In any of the cases, the chatbot's response, with possible qualifying questions leads to the way to solve the problem or how to return an item.

However, it isn't learning as it goes. It is responding according to what it understands based on its interpretation of the language being used in the interactions. Those "interpretations" are essentially its matching of the conversation and its tone to an ontology created to help ascertain the meaning of the conversation and in the limited, pre-programmed way I described, its intent. The bot will then carry out a pre-configured action that has been customised for the channel it is in (e.g. Twitter, Facebook, web) and for the type of action (e.g. customer service, marketing) that is required. The rules for the response are set in the rules engine that drive the chatbot.



Artificial Intelligence-Driven Chatbots

Artificial Intelligence is arguably one of the most hyped and, at the same time, a valuable asset for many 21st century businesses. Despite fears of Skynet takeovers and independent weapons toting robots wiping out civilization as we know it, (though we always have John Conner if we need him...), it is seen by most business leaders as a significant competitive advantage. In a late 2017 article in the MIT Sloan Management Review entitled "Reshaping Business with Artificial Intelligence (by Sam Ransbotham, David Kiron, Philipp Gerbert, and Martin Reeves), they found that more than 85 percent of the business leaders polled saw that advantage. Given that less than 20 percent have deployed anything using AI, that is a great leap of faith. However, it seems to be justifiable, due to the positive returns reported in case after case.

The fundamental difference between an AI-driven bot and a rules-based bot is that AI uses machine learning to understand the customers conversations current, past, and future and make changes to its own responses accordingly. NLP and NLU are used so that the 'bot can learn the nuances of language and mark the similarities in the meaning of different turns of phrases. This way it can understand the different ways that a person might say something and mean the same as something said in a different way. That is a universal value. The AI itself is applying what the machine learning is taught to make changes in answers to questions or even in how it responds, based on its level of success or failure in past interactions with the customers. The value of artificial intelligence driven chatbots is that they learn without human intervention and they can generate answers that aren't necessarily scripted.

The downside of the AI-driven chatbots are that they are more complex and thus take a lot longer to bring online and thus, the answers they give are more often wrong in their earlier stages than rules-based chatbots. The AI-driven chatbot's value is in its ability to learn and correct and increasingly personalise the response to the customer it is interacting with.

But that is the equivalent of a learning curve. Learning curves e.g. wrong answers in the world of the highly demanding customer can be deadly. So, what is the value of implementing the AI-driven chatbot, once again, given the inherent risk?

AI-driven Chatbot Benefits

As with rules-based chatbots, the benefits are derived from improved engagement and direct revenue, or at least increased willingness to spend.

The lowest hanging fruit for AI-driven chatbots are in ecommerce, marketing, customer service and some vertical industries. All of them require knowledge of the past history of the customer, if any, a human-like interaction and a personalised response that is meaningful to the respondent. Assuming a somewhat successful engagement, they also require something that you may not have read much discussion on but is nonetheless important—a narrative thread. That means some continuity in the conversation.

A simple example will suffice. My house is substantially Alexa-driven—that means the multiple Echoes I own are constantly used for everything from asking questions to automating a number of smart home functions. One way that I use it is to check bank balances and there is an Amazon Skill that can be enabled for my bank to carry out a number of banking functions like bank balance, deposits etc. What makes this interesting is that if I've used it before, after I access the account via Alexa, it says to me "welcome back" or some permutation of that. It finds that I've used it before and more importantly, it recognises that I've used it before by saying it. With a small personalised response based on a simple check against its data on my visits via the Skill, the interaction is so much more personal, warmer, than it would be otherwise.

AI-driven chatbots can learn for example, from my response to the "welcome back" or my "no, that's NOT what I was looking for" where rules-based chatbots can't. What makes this important, it allows the chatbot to be more responsive in a more approachable way.

Chatbots represent an opportunity for brands to find new revenue sources.

But AI-driven chatbots' best uses are in areas that are customer-facing or industries that customers have some emotional investment in. For example, ecommerce is starting to pioneer the use of chatbots and voice interfaces. It even has a name: conversational commerce. Chatbots represent an opportunity for brands to find new revenue sources. Ubisend's 2017 Chatbot report found that all in all, more than 20 percent of all UK consumers are willing to purchase goods via chatbot and willing to spend $435 on the average. Millennials lead the pack with the willingness to spend $670. That is a significant revenue source—and one that can have immediate results. The chatbot's value in the world of ecommerce is not just interaction, but transaction.

You might be thinking, that sounds nice in theory, but what about in real life?

AI-Driven Chatbot Use Case: Sephora

One of the best examples of AI-driven chatbots are the bots that are used by Sephora, the beauty products retailer. While they started with a single chatbot built on the Kik messaging platform, they actually have expanded to chatbots with names and faces who have specific purposes ranging from DIY tutorials on beauty products applications (Brittany Marie) to a chatbot who will help you find the celebrity's styles that are most appropriate for you (pinksparkles)—and several in between. They even have a chatbot that will do appointment setting at the stores and found that bookings have gone up 11 percent directly due to that chatbot alone. Sephora realises that their use of AI-chatbots is experimental. Bindu Shah, the VP of Digital Marketing at Sephora in an article in Women's Wear Daily (WWD) (January 2017) conveys that clearly:

"Clearly, there's no "playbook" for bots just yet, but we're hopeful that by experimenting, learning and iterating, we will continue to uncover the potential in chat and inspire the rest of the industry while doing so."

There are many examples of successful AI-driven chatbots that go well beyond ecommerce but not enough space here to cover even a small percentage of what is out there in retail, financial services, entertainment and media, and even health services among many other areas. But at least you have a start.

Conclusion

I'm barely scratching the surface of how chatbots work, what they can do and the present and future value they can provide. However, what I hope you see is evident is the need for chatbots to handle the demands of contemporary customers both individually and en masse. While chatbots are one part of an overall communications and engagement strategy when it comes to your customers, they are becoming a better and better option as your customer base continues to grow. Rules-based chatbots and AI-based chatbots each have value and which direction you go depends on what your business needs are, the resources you have available and the time you have to get to market with it. But with the basics in hand, the definitions you need, the examples of success, some of the more mainstream use cases and the direct and indirect value to your business and to your customers, this should be a good starting point in thinking about using them.

One final question: Did I pass the Turing Test?

About the author

In addition to being the author of the best-selling CRM at the Speed of Light, now in four editions and nine languages, Paul Greenberg is President of The 56 Group, LLC, a consulting firm, focused on CRM and Social CRM strategic services. He is a founding partner of BPT Partners, a training and consulting venture composed of a number of CRM luminaries.

His book, CRM at the Speed of Light: Social CRM Strategy, Tools, and Techniques for Engaging Your Customers, now in its fourth edition, is in nine languages and has wbeen called "the bible of the CRM industry". It has been used by more than 70 universities as a primary text.

Paul is the Executive Vice President of the CRM Association. He currently is the Chairman of the Board of Advisors of the University of Toronto's Rotman School of Management CRM Centre of Excellence. He has been a Board of Advisors member of the Baylor University MBA Program for CRM majors, and the co-chairman of Rutgers University's CRM Research Center.

Paul has developed strategies and helped define CRM and social CRM products for all the major vendors in CRM and in social media. He has developed broad CRM strategies and programs for a significant number of larger enterprises and worked with them from inception of the idea of a CRM strategy through vendor selection when needed.

Paul is considered a thought leader in CRM, having been published in numerous industry and business publications over the years. He was elected to CRM magazine's CRM Hall of Fame in 2010—the first non-vendor related thought leader in its history.

He is known particularly for his work on using social media, such as blogs, podcasts and wikis and social networks in CRM as tools for customer collaboration. His blog, PGreenblog (the56group.typepad.com) has been #1 rated by multiple groups from 2005-10. He now also writes the CRM blog for high profile technology media property, ZDNET (http://blogs.zdnet.com/crm).

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