

Preparing Financial Service Providers for the Bot Revolution

Find out how to make the most of the bot revolution and get it right the first time.

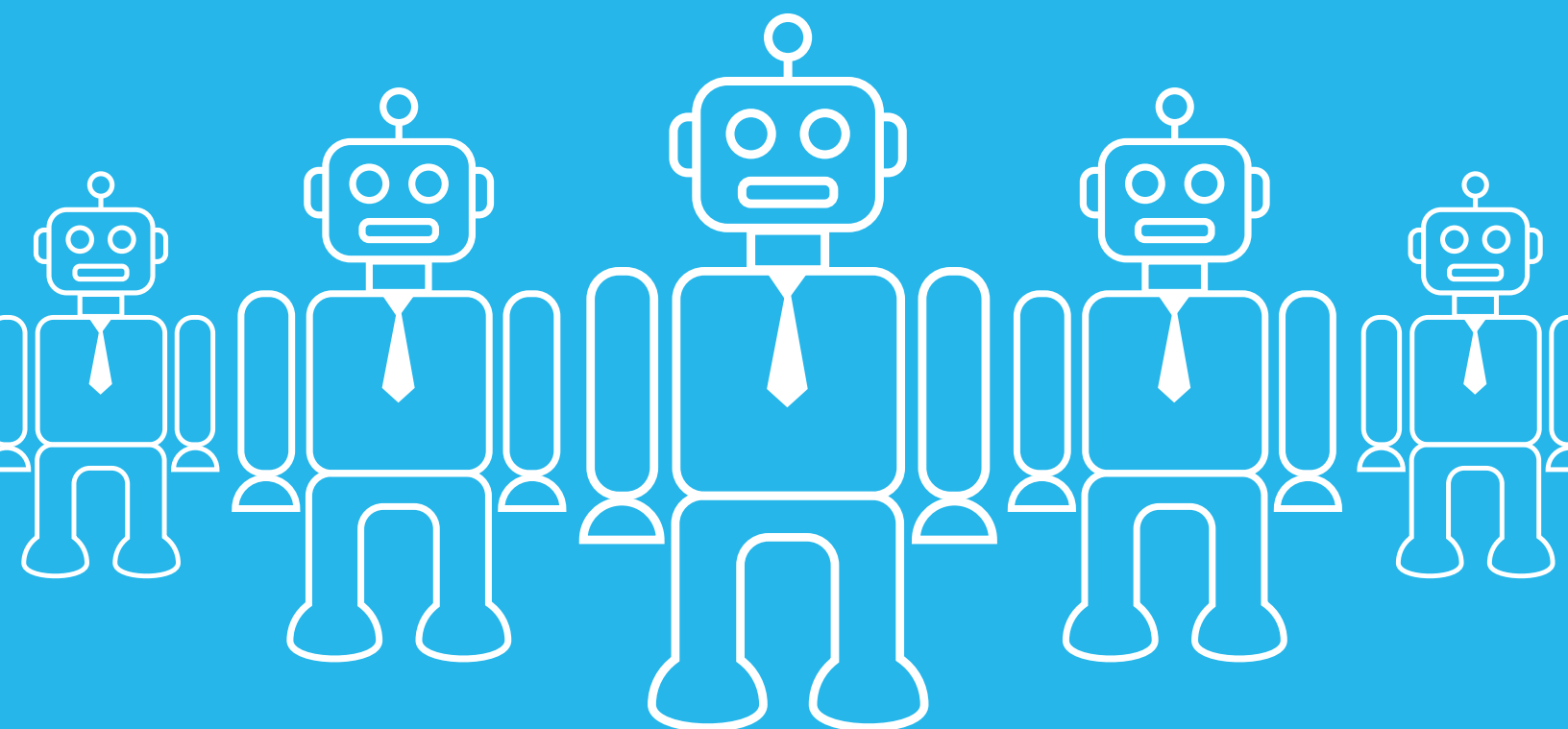


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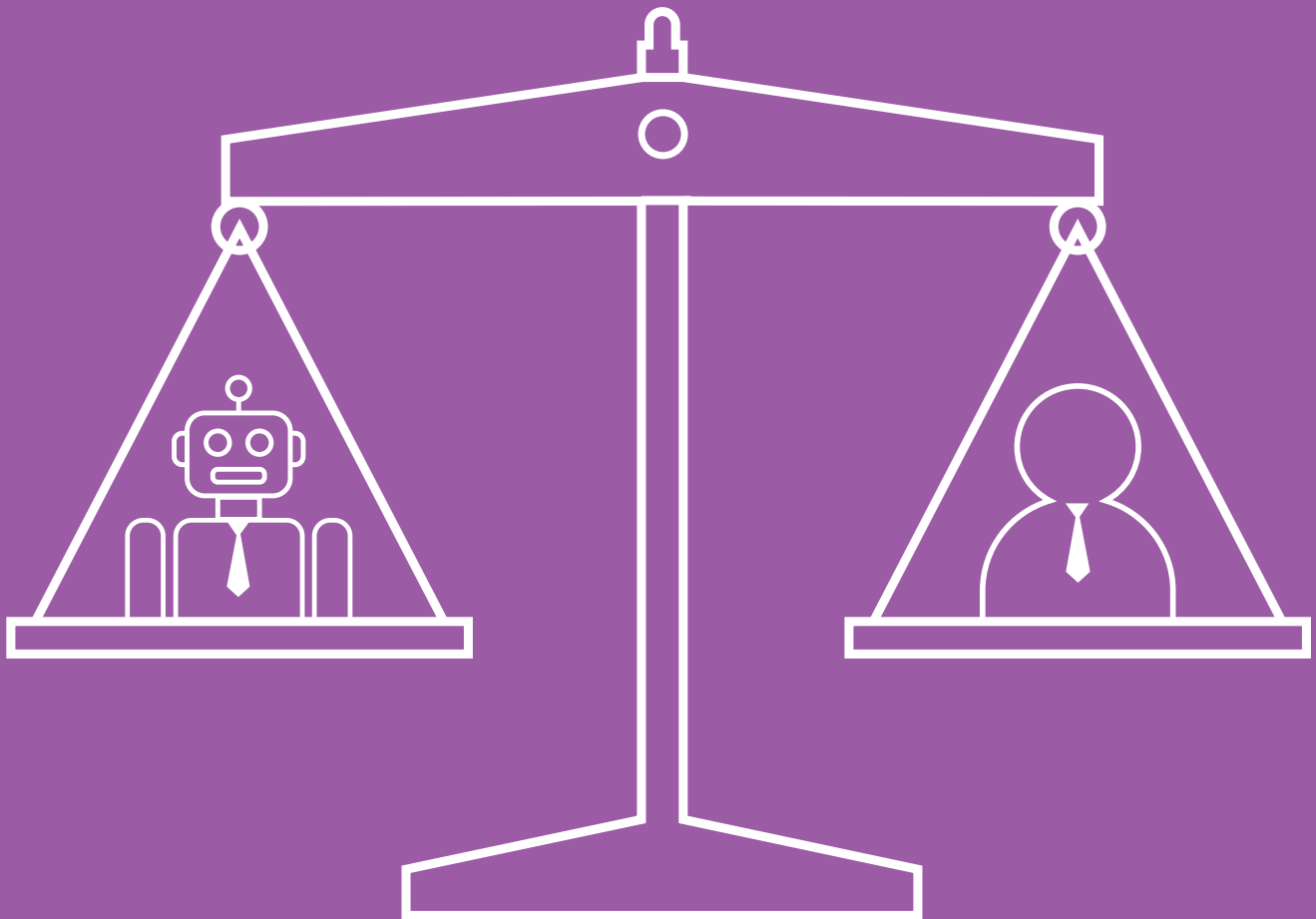
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The Power of the Bot

Chatbots are a hot topic of discussion, and it's easy to see why. With the ability to deliver individualized guidance, sales support, customer service, and other commerce-related functions, chatbots are completely changing how consumers interact with their brands. Banks, as an integral part of consumers' lives, are ideally suited to benefit from this emerging technology. While most banking providers have plans to implement or have already launched a chatbot, moving forward too fast could mean getting it wrong. Read this eBook to find out how to make the most of this artificial intelligence (AI) innovation — and get it right the first time.

What's a bot? Short for “web robot,” **a bot is a software app that runs simple, repetitive tasks (or scripts) over the Internet.** When paired with a language interface that enables human interaction, bots become “chatbots,” ready to communicate with users via chat, messaging, or voice.

To Bot or Not to Bot?



Not all chatbot-based experiences are equal. While some bots have succeeded, many bot implementations have provided inconsistent and even awkward experiences for consumers. Additionally, financial mistakes can have dire consequences for consumers. After all, it's one thing if your 'tacobot' botches your taco order, and entirely another matter if your bank's chatbot forgets a "0" on the end of your account balance or deposits your money into the wrong account.

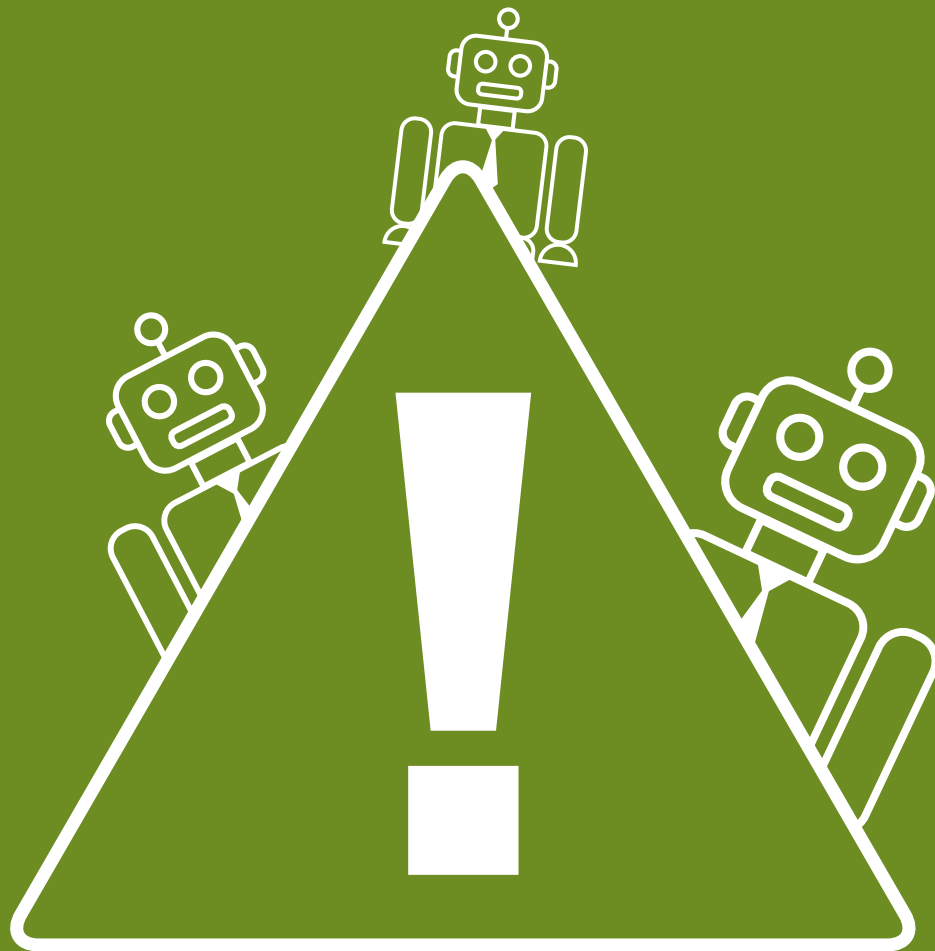
There's a limit to consumers' time and patience, so if a banking customer service chatbot can't understand the questions it's asked – or provides the wrong answers due to insufficient or poor data – consumers will find the answer elsewhere.

With many chatbot implementations to date falling short of expectations, should your bank sprint to implement one, or wait until the trained data that supports the technology has evolved and risk falling behind competitors? The answer depends.

“Forrester (2016) found that although chatbots are developing rapidly, customer experience is not. **Many fail to effectively meet users' needs** due to poor infrastructure and a lack of fundamental understanding of AI.”¹

¹ “What the Rise of Chat Bots Means for Financial Services.” Chatbot's Life. April 18, 2017.
<https://chatbotslife.com/what-the-rise-of-chat-bots-means-for-financial-services-486d91e5043e>.

How to Minimize Bank Bot Risks



With highly publicized chatbot failures like Microsoft's Tay and Facebook's AI bots, it makes sense for banks to proceed with caution. While bots might not be ready to be bankers just yet, there are a number of things banks can do to be in a position to take advantage of next-gen AI and bot technologies. Read on for four steps you can take to leverage the chatbot opportunities while minimizing risks.

“Although companies the world over are looking forward to embracing chatbots, most of such **artificial intelligence (AI) -powered platforms are failing worldwide** and some early adopters have dropped chatbots owing to disappointing performances.”²

² Ians. “Why artificial intelligence based chatbots are failing worldwide.” *The Financial Express*. June 01, 2017.
<http://www.financialexpress.com/industry/technology/why-artificial-intelligence-based-chatbots-are-failing-worldwide/696716/>.

Step 1: Decide on the Best Chatbot App



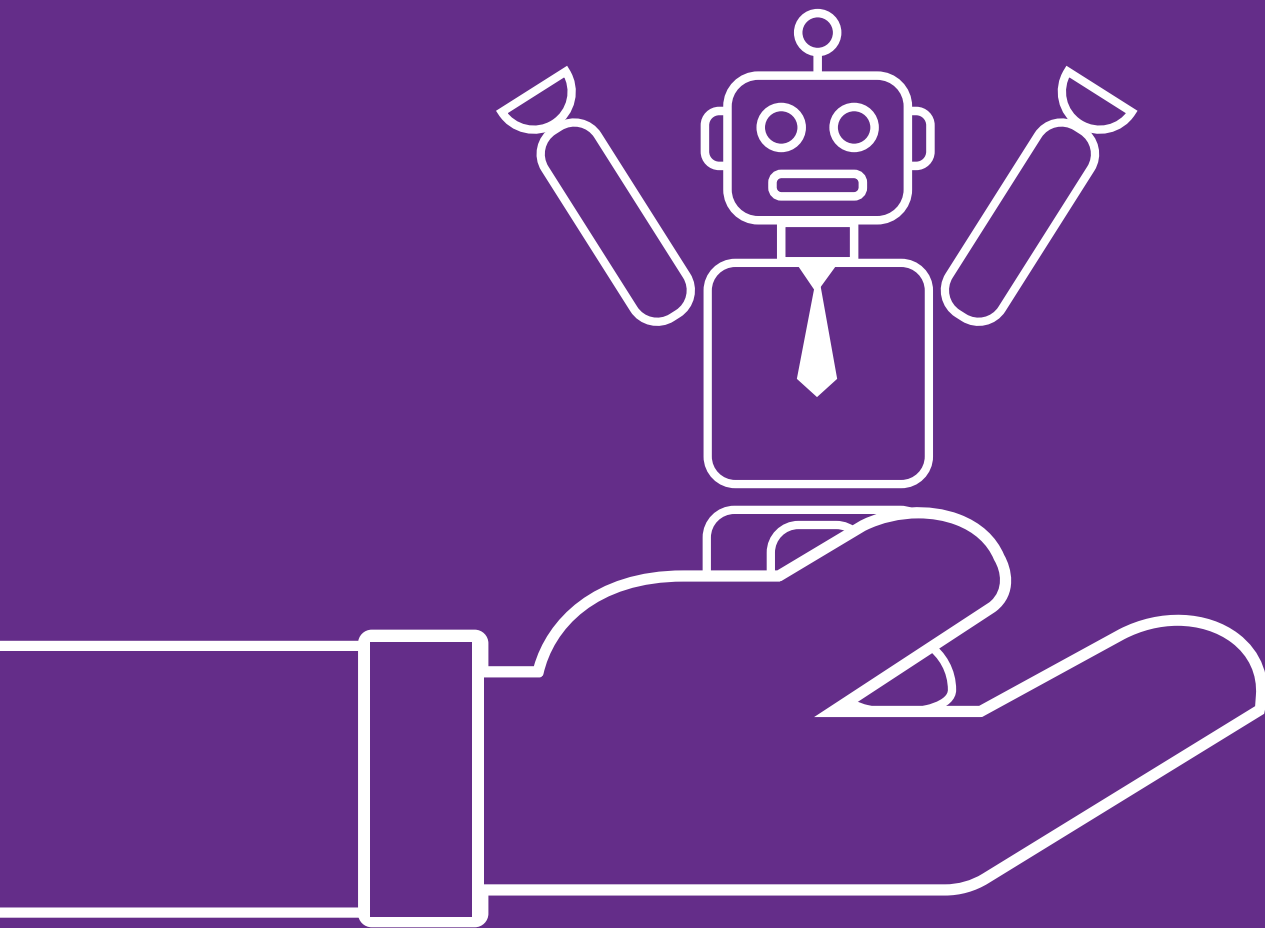
The first step is to decide on the best chatbot application for your situation. From social media and mobile apps to instant messenger, text, or speech, chatbots can engage customers in a number of ways. The key is to find the platform for engagement that best fits with your customer lifecycle. In addition, start with the touch point that best fits your use case. It can be wise to focus on something specific, such as spending advice.

“Most chatbots fail because companies don’t clearly define their purpose.”³

Xiofeng Want, Senior Analyst, Forrester

³ Ians. “Why artificial intelligence based chatbots are failing worldwide.” *The Financial Express*. June 01, 2017.
<http://www.financialexpress.com/industry/technology/why-artificial-intelligence-based-chatbots-are-failing-worldwide/696716/>.

Step 2: Prepare to Support Your Bot



Supporting new apps and mobile styles may also require adding new procedures or re-engineering existing business processes and training employees on the new processes and tools. The right data at massive scale, machine learning, and artificial intelligence are also required for engineering a smarter bot.

By adopting cutting-edge data intelligence solutions, banks can deliver a personalized chatbot experience for users that provides intuitive answers to the most commonly asked personal financial wellness questions. While bots offer the illusion of simplicity at the front end, a lot of complexity, such as the data and natural language processing, goes into creating a great customer experience.

“Bots are only as good as the data, software, and systems behind them.”⁴

⁴ “Data Intelligence-Enabled Next Gen Chatbots Can Fuel Banking Customer Engagement.” Envestnet | Yodlee.
<https://www.yodlee.com/resources/whitepaper/data-intelligence-enabled-next-gen-chatbots-can-fuel-banking-customer-engagement/>

Step 3: Remember, Context Is Crucial

account information

past behavior

user preference

current location

recent transactions

environmental factors

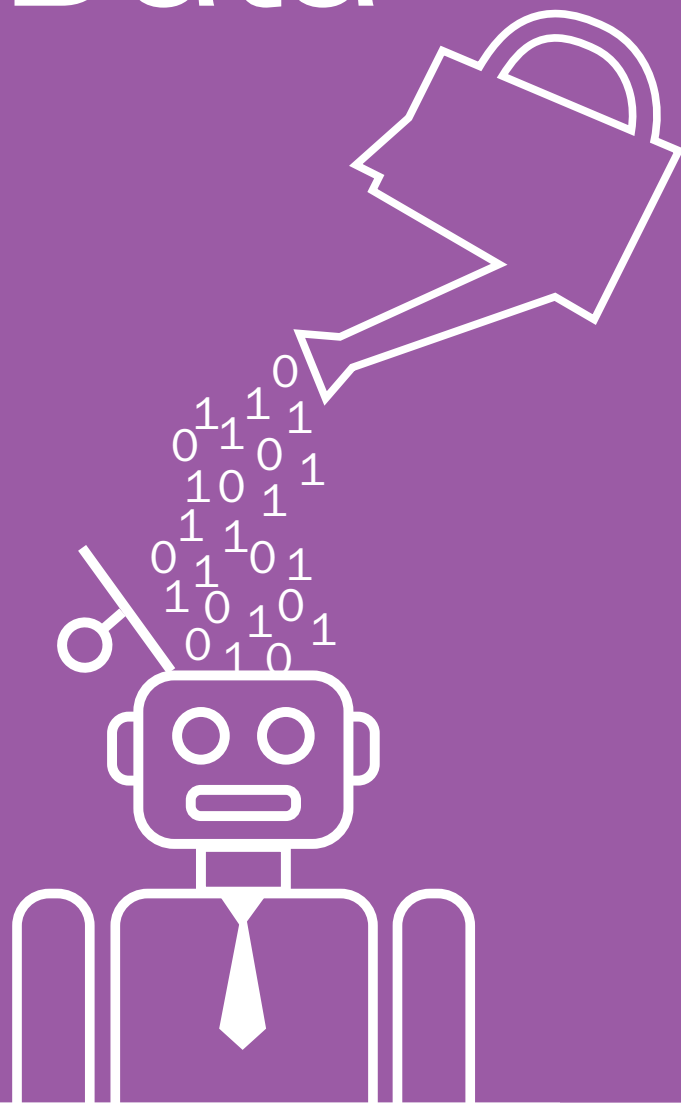
Context is key to a successful chatbot experience, with context referring to everything that makes the customer feel that they are having a personal interaction with someone who knows them. The best bots “know” their users, with access to customer information such as account information, past behavior, current location, environmental factors, recent transactions, and user preferences. The more consumer data available to a chatbot, the more effective the interaction and service can be. Data intelligence and personalization are key.

“The banks creating **lifestyle banking with conversational AI** are the ones that are investing in their data right now.”⁵

Zor Gorelov, CEO of Kasisto

⁵ Wannemacher, Peter. “Why Most Banks Should Not (Yet) Roll Out Bots.” Forrester Blogs. August 21, 2016. http://blogs.forrester.com/peter_wannemacher/16-08-31-why_most_banks_should_not_yet_roll_out_bots

Step 4: Feed Your Bot the Best Data



Whether a financial bot succeeds or fails depends in part on the data that's available. There needs to be enough data from transactions and other sources to be able to train AI algorithms, identify patterns, and make predictions. This combination of data, artificial intelligence and machine learning enables a chatbot to understand the meaning behind the questions customers ask (and don't ask), and identify and deliver the information customers need. Machine learning enables the bot to get smarter as it engages in more conversations and receives even more data.

“Over time, as more and more consumers interact with them, **chatbots will become smarter in answering questions and evaluating conversations.** The formula is simple — the more you feed it, the more its vocabulary grows and the more capable it becomes.”⁶

⁶ Welltok, Jeff Cohen. “Paging Dr. Chatbot? Not So Fast.” VentureBeat.com. May 9, 2017.
<https://venturebeat.com/2017/05/09/paging-dr-chatbot-not-so-fast/>

Bank Bot: Use Case Example 1



How might a consumer work with a banking chatbot? Here's an example with a twenty-something who received a \$15,000 signing bonus from a new employer.

After alerting the Millennial of the new deposit, the chatbot provides three options to use the cash based on the user's historical data—pay down student loans, eliminate credit card debt, or save for an emergency. The Millennial was originally planning to spend the whole amount to buy a new car, but the chatbot walks them through the financial advantages of paying off credit cards. As they execute that transaction to pay down the Millennial's credit card debt, the chatbot provides further suggestions on how the Millennial can improve their financial wellness.

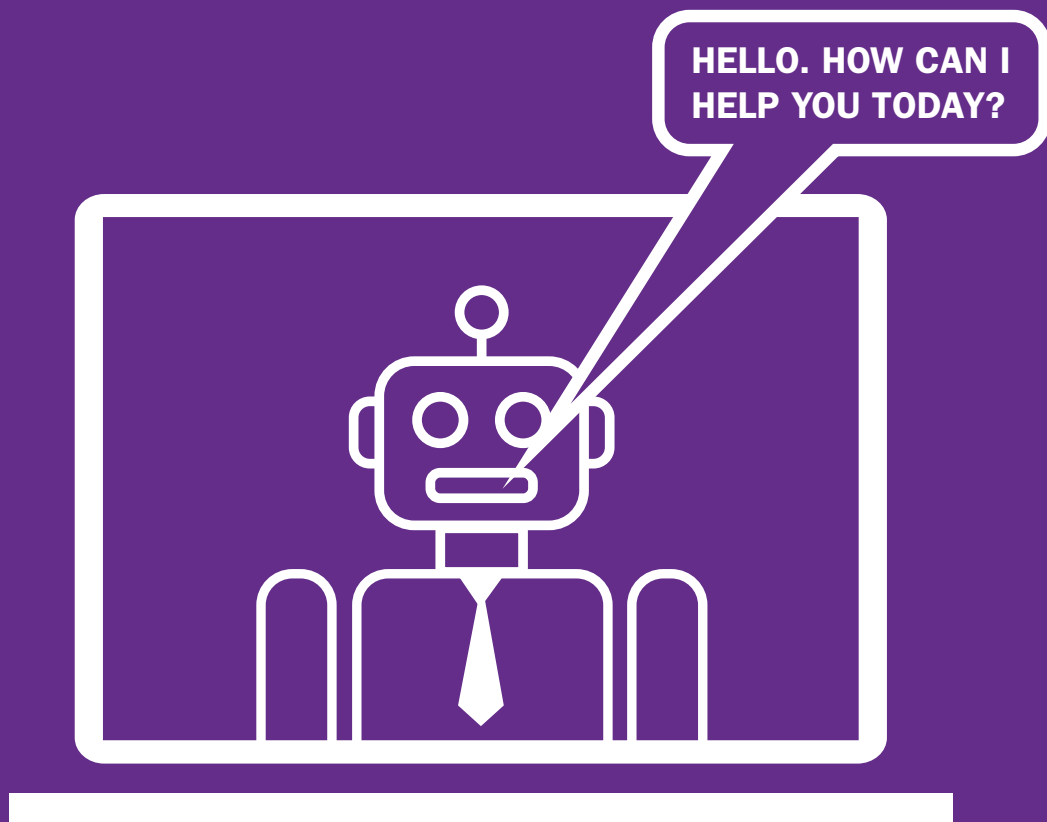
Bank Bot: Use Case Example 2



Imagine a consumer opens up her banking app, and is interested in buying a \$200 pair of shoes. This scenario illustrates how actionable data and insights are used through descriptive analytics, predictive analytics, and prescriptive analytics.

- **Descriptive:** Our consumer asks, *“What’s my checking account balance?”* She does the mental math to figure out if she can afford the shoes, or if it will hurt her immediate financial plans, and makes her decision based on this simple question and answer.
- **Predictive:** *“Can I afford to spend \$200 today?”* The bot, with the internal financial data, creates a forecast based on historical recurring income and financial obligations. The bot can look ahead to the next couple weeks, and let her know what impact the \$200 purchase will have.
- **Prescriptive:** *“Should I buy these \$200 shoes?”* This is where the bot acts as a financial coach. At this point, the bot will understand insights about the consumer and her behavior, people just like her, and the long-term financial goals she’s trying to achieve. The bot will advise our consumer, “that will impact your budget for the month, would you like me to give you a couple options on how you can save money?” The bot could even identify our consumer’s location, and could suggest where the shoes are being sold for less, or locate a coupon to help reduce the price and make the purchase less impactful on her financial situation.

Bank Bot: Use Case Example 3



Instead of going to a dashboard, consumers can interact immediately with bank bots in a conversational user interface. Urgent communications could be pushed to the consumer, or the consumer could ask questions to the chatbot.

For example, if a consumer was worried they had overdrawn their checking account, they could ask the chatbot for their account balance, find out which transactions had cleared, and find out what to do if their account has been overdrawn.

Interactions could also be proactive — the chatbot could notify the consumer before their account has been overdrawn and suggest proactive actions the consumer could take to avoid overdrafts and improve their financial wellness.

Investnet | Yodlee: The Data Intelligence Key

As machine learning and data intelligence is applied and data patterns are recognized, chatbots can offer personalized financial recommendations that deepen the customer's relationship with their bank. The key to these personalized user experiences is the data intelligence harnessed to financial domain expertise—and data intelligence is where Investnet | Yodlee leads.

Investnet | Yodlee provides the best and most comprehensive financial data from more than 16,000 data sources across retail banking, credit, and wealth management, made possible through the strengths of our data acquisition capabilities, extensive data cleaning and enrichment expertise, and massive scale. Such massive scale allows Investnet | Yodlee's Data Intelligence and its ability to attain powerful pattern recognition and detection, to enable predictions which can be used to provide personalized and actionable financial guidance. Ultimately, we enable financial institutions and fintech innovators with a data intelligence solution, helping them create uniquely simple and personalized user experiences.

“Chatbots, along with virtual assistants and other digital services, will be **far more effective when they have access to real-time data and systems of insight.**”⁷

⁷ Wannemacher, Peter. “Bots Aren't Ready To Be Bankers.” Forrester. August 31, 2016.
<https://www.forrester.com/report/Bots+Arent+Ready+To+Be+Bankers/-/E-RES117149>

Conclusion

The time to prepare for next-gen chatbots is today. Financial institutions that want to boost customer engagement with chatbots need to build or partner with enterprises that can leverage data intelligence and machine learning-based systems that continuously analyze data, develop insights and drive personalized financial conversations with their end users. By partnering with Envestnet | Yodlee, financial institutions can utilize the data and next generation analytics needed to open the door to a new banking future.

How can I learn more?

- [Download the data sheet:](#) Envestnet | Yodlee Financial Wellness Solution for Retail Banking
- [Download the whitepaper:](#) Data Intelligence-Enabled Next-Gen Chatbots Can Fuel Banking Customer Engagement
- [View the webinar:](#) Boosting Customer Engagement with Next-Gen Bots
- [Learn more about](#) Envestnet | Yodlee retail banking financial wellness solutions

For more information, visit: **www.yodlee.com**.





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