

Chatbot

Redefining Customer
Engagement in BFSI



Good Morning. How may I help you today?

Will I have enough cash till the end of the month?



Well, you have an \$81 cable bill tomorrow, but that still leaves \$328 in checking. Is that enough?



happiest minds
The Mindful IT Company
Born **Digital** . Born **Agile**

INTRODUCTION

Live chat has the highest levels of satisfaction at about 70% in comparison to other forms such as emails and phones. Millions of customers today are paying bills, checking transactions, buying services, reviewing products, making investments and even scheduling real-time payments. So it has become even more imperative for banks and financial companies to provide them with the best customer experience.

On an average happy customers can be worth up to 10 times the value as their first purchase and are 60–70% more likely to continue if they are happy with the product or service.

There are various channels through which customers interact with the banking system today including email, IVRS systems, telephone, text messages, social media platforms and face to face interactions but the need of the hour is to create an Omni channel experience. A personal assistant who is just a message away has the potential to be the favored way of accessing data on personal banking and financial information in the near future. Gartner predicts that by 2020, customers will manage 85% of their relationship with the enterprise without interacting with a human – truly a great prerequisite to start thinking about

Chatbot implementation now.



THE EVOLVED CUSTOMER

To understand how customer interaction can be improved, let us consider a typical bank scenario. The pain points that bother customers and bankers today, include

Insistence on face to face interaction by customers

Disruptions in the day of the banker doing simple tasks

Rigid programming of IVRS

Absence of analytical tools in current programs

Long waiting times for customers

Added to these difficulties is a customer who is constantly on the move in a globalized market. These customers are constantly exposed to better and more sophisticated systems across the world and expect a similar or better standard of experience back home at their banks.

Due to complex financial circumstances, 57% of US consumers make short-term decisions based on emotion that over time can sabotage their long-term financial health. The analysis for understanding customer investment needs is done physically by a financial planner, this means that the system will work at a slower pace. Even with the availability of analytical tools there are limiting factors that do not allow the analyst to make the best choice in a shorter period of time. Thus, instead of personalizing the investment plans, customers are presented with broad based plans that may not cover their needs, hence resulting in loss of customer satisfaction. People can become highly sensitive when it comes to money. Most of the time they are dealing with the bank just for simple transactions but they consider the bank to be a partner in their future endeavors and hence expect financial planning and assistance from the bank on a personal level.



COMPETITORS GALORE



Customers want a uniform banking experience across branches at any selected location. The lack of the right technology has resulted in slower operations in banks and financial institutions forcing customers to switch to more efficient options. Today banks are more strictly regulated and with rising competition, it has become crucial for a bank to retain customers rather than acquire new customers in order to stay profitable. On the other side of the fence, you have the FinTech companies, with governments across the world supporting investments into them. The industry is currently at a staggering \$50 billion with nearly 45% of customers opting to stay with FinTech services because of ease of use. In order to replicate the same experience as the Fintech companies would mean to have an operation that is supported by aggregation and structuring of data into content repositories that can be accessed at a swift pace.

It is estimated that Millennials will spend nearly \$200 billion annually by 2017. According to a 3-year survey of more than 10,000 millennial consumers, 53% of them don't think their bank proposes anything alternative than other banks, and 1 in 3 are open to switching banks in the next ninety days.

Millennials are driving the information-sharing movement with the understanding that data in perspective helps create an improved, more personalized customer support experience. They are looking for a faster and more efficient experience and in order to handle all the issues that have been pointed out in the legacy system, the BFSI industry is now moving to upgrade the customer experience for its clients by adding a whole new member to their team - a digital query assistant (DQA) a.k.a Chatbot. Consumers are becoming more cognizant and comfortable interacting with automated customer service apps and Chatbots, according to NewSupport.com survey.

CUSTOMER SENTIMENT

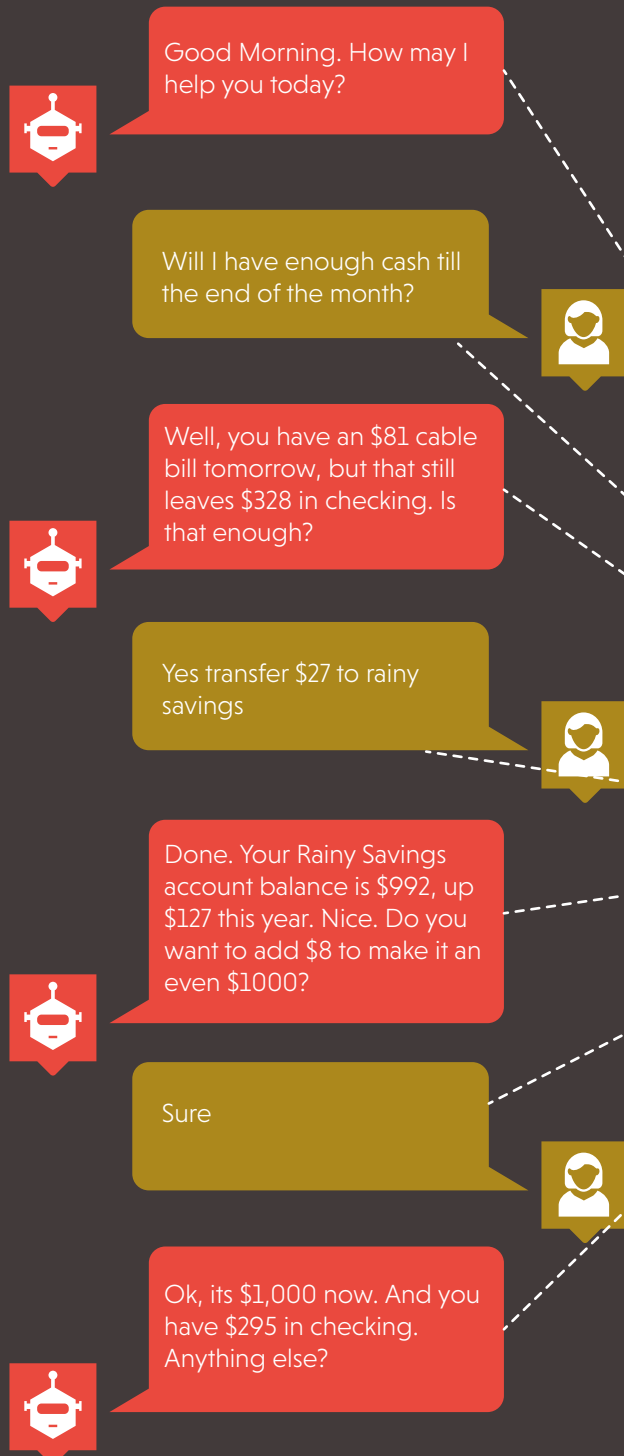


Chatbot

THE RISING PROLIFERATION

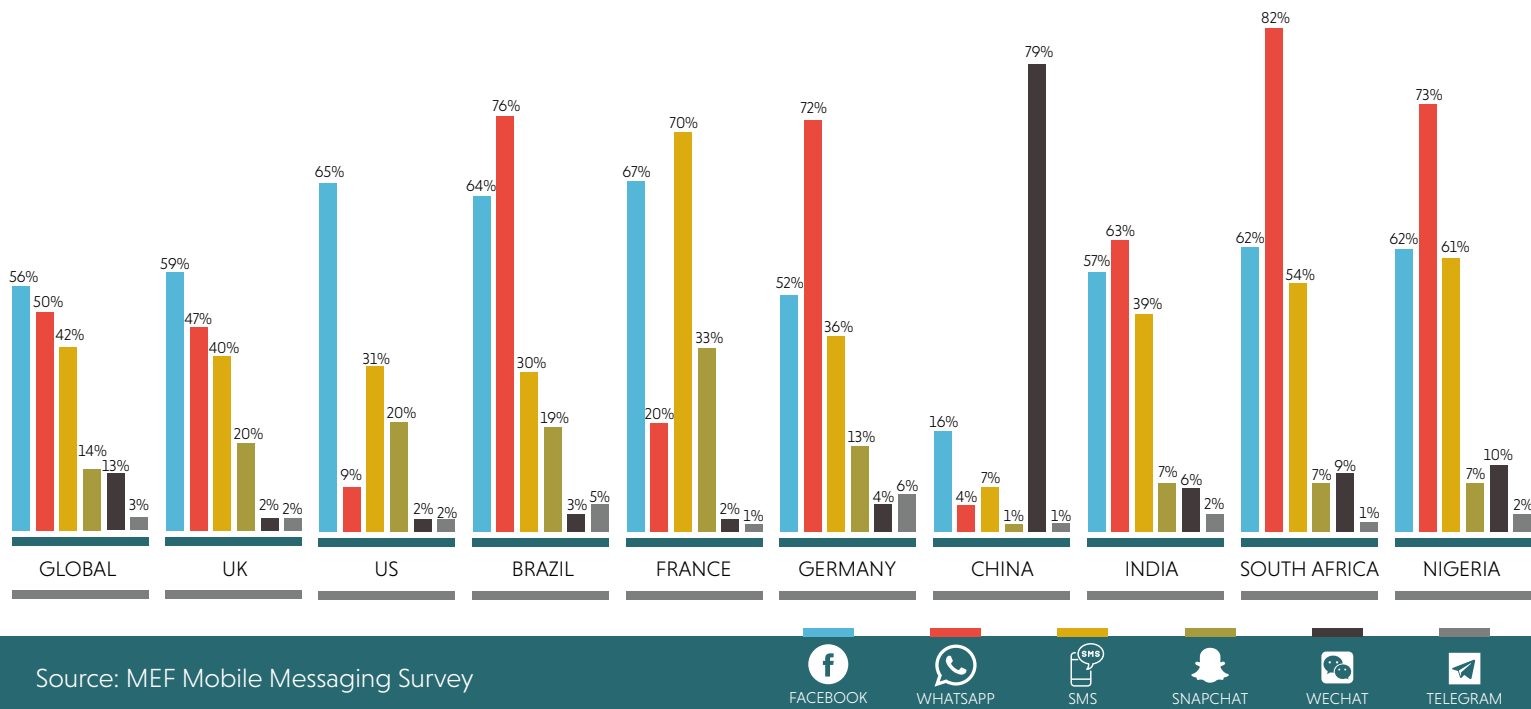
Imagine this scenario when you are interacting with your bank

This sort of interaction with a client on a daily basis is the next big game changer for the BFSI-FinTech industry. Let's understand what a Chatbot really is – "it is a computer program that maintains a conversation with a user in natural language, understands the intent of the user, and sends a response based on business rules and data of the organization" – as described in the Chatbots Magazine. A Chatbot can chat over any messaging platform and the embedded AI will help it understand the context of the conversation using keywords.



PROACTIVE FUTURE SUPPORT

The year 2017 is predicted to be the year of breakout for the Chatbots. Some of the major driving forces for this include Messenger Services dominating the mobile space, reduction in development costs of Chatbots and downtrend in app usage. According to a Pew Research report published in 2015, 36% of smartphone owners use mobile messengers. This number grows to 49% in the 18–29 age group.

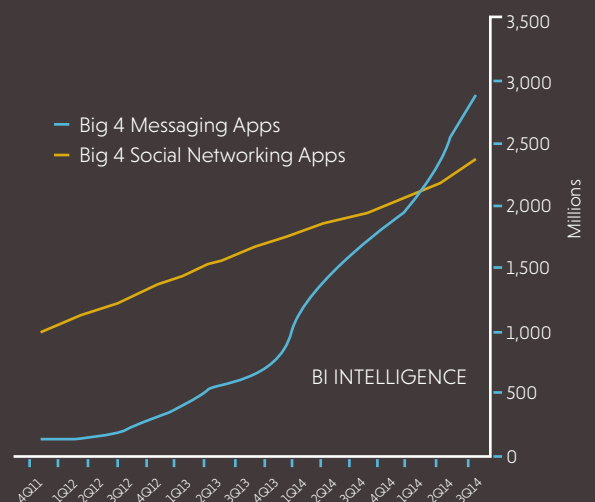


Messenger services are supported today by Google, Microsoft and Facebook and they are dominating the space of mobile communications. These messenger services have even surpassed the social media interactions in the past year.

In March 2016, Facebook and Microsoft had made very important announcements supporting Chatbots and had also released long-term strategic plans for their development and deployment. Software giants including IBM, Microsoft, Facebook and Google have released and made available free advanced development tools and frameworks along with vast amounts of research data on Chatbots. This has resulted in dramatically reducing the costs and now developers are creating sophisticated Chatbots utilizing the latest advances in AI, Machine Learning, NLP, Speech Recognition and other leading cutting edge technologies.

Messaging Apps have surpassed Social Networks

Monthly active users for top 4 social networks and messaging apps



Source: Companies & Intelligence

MEET DQA

OUR PROPRIETARY CHATBOT

Managed Content as a service (mCaaS™) – Digital Query Assistant that enables customers and support associates to get the most relevant and contextualized content at their fingertips through a cognitive self-learning platform. The solution allows you to find the most precise and contextual answers from multiple sources and languages in a conversational manner.

Chatbot or a **Digital Query Assistant** Solution powered by the Managed Content as a Service Platform (mCaaS™) from Happiest Minds enables businesses in addressing the current challenges and taking it to the next level of customer brand engagement. With Digital Query Assistant Solutions, we enabled 37% increase in End-customer satisfaction, 40% reduction in resolution time and more than 10% cross-selling and up-selling opportunities for India's Leading Protection & Assistance Company. Our Chatbots can sit on top of any existing Call Center or Contact Center solutions for BFSI, delivering the value. The data can be ingested to the platform from any CRM, DAM, ERP, PLM, Ticketing, etc. into the DQA platform with deep learning and intelligent search features.

The DQA is also equipped with advanced Cognitive Analytics KPIs which work using flexible and collaborative neural networks over a single interface design. Real-time self-assembling of knowledge based on a customer query, ML ability and answering capability, and intelligent search and query engine are some of the many features that a DQA can help with.

The mCaaS™ Chatbot powered by the Vertical AI framework of DQA has the following Chatbot Avatars:



Banking Self-Serve - Sales or Service Digital Assistant

This is the star in customer relationship management with the ability to take customers through process and functions seamlessly without much human interference.



Credit Card Application, Fund Transfer, Late Payment Charges remission, and Onboarding

Yes the bots can do it all and work as virtual assistants to customers and resolve their queries and tasks in real time.



Super-Agent aka Call Center Virtual Assistant

This Cognitive bot has the power to assemble knowledge and provide a single system of truth for instant call resolution.



Knowledge / Research Assistant for Market/Financial Research Industry

This is the best friend when you need answers for personalized queries on a research, without having to study the voluminous reports in entirety. Research analysts can also use this bot as a virtual buddy to help them create research reports for any topic.

The application for these bots is at Airports, Theme Parks, Virtual Stewards, Retail Stores as Travel guides and Virtual Assistants. These In-the-Moment advisors, become a real time virtual buddy, interact with customers and proactively recommend products, provide knowledge/guidance and intuitively assist in personalized sales.

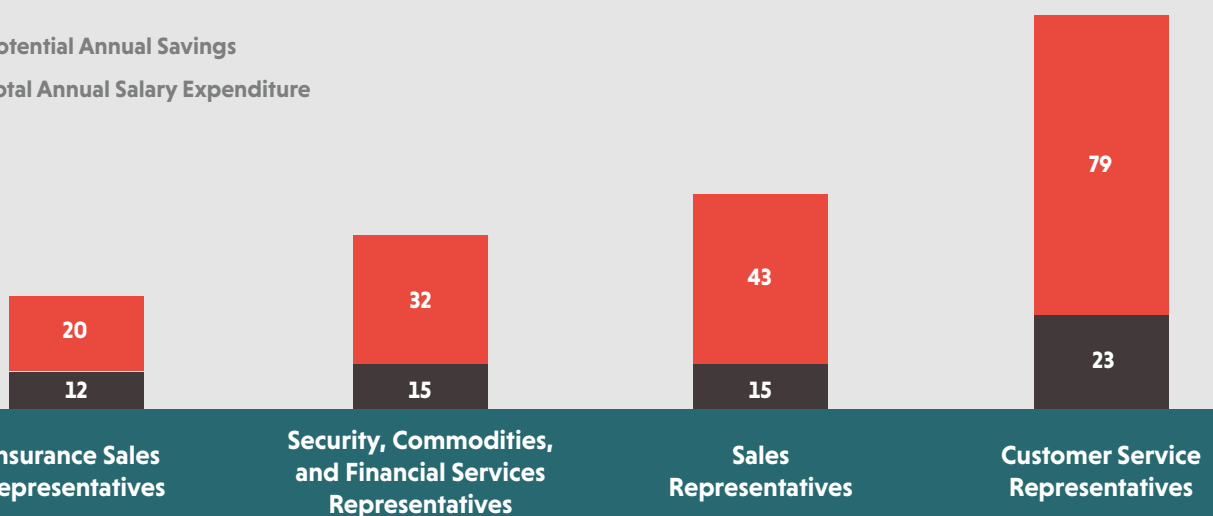
CRUNCHING THE **NUMBER** FOR CHATBOTS IN THE BANKING SECTOR

While internet banking had been growing steadily since the early 2000, it's the increase in smartphone saturation that has led to a dramatic rise in mobile banking. Statistics from the Federal Reserve suggest that 43% of all mobile phone owners with a bank account had used mobile banking in 2016, a jump of 10% over the previous two years. Annually, in US, \$79 billion is dished out to customer service representatives. Chatbots could replace 29% of these representatives resulting in nearly USD23 billion savings annually, with the added benefit of accuracy and savings due to error reduction in the day to day processes. Similarly, Chatbots could result in USD15 billion savings in the salaries of sales representatives as well as in financial securities, commodities markets and financial service representatives. Chatbots could also save more than half the annual expenditure in salaries for insurance sales representatives.

Potential Annual US Salary Savings Created by Chatbots 2016

(Figures in Billions USD)

■ Potential Annual Savings
■ Total Annual Salary Expenditure



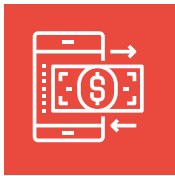
Source: McKinsey Estimation via BIIntelligence Report, 2016

Note: Estimates are calculated against the potential of bots replacing these positions :

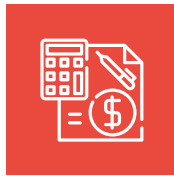
Insurance Sales Rep - 60% | Security, Commodities and Finance Rep - 46% | Sales Rep - 36% | Customer Service Rep - 29%

One of Asia's largest banks, DBS is currently trying to insert its banking app that allows for chatting in outside messaging services such as WeChat and WhatsApp. DBS is convinced that this is the future although most people don't view it that way at the moment.

Chatbots have a wide range of applications in BFSI space as they can be programmed to have deep domain knowledge and either be prebaked or purpose built depending on the deployment domain. The intent of the **Chatbot** usage is to drive more customer interaction with leading questions and then when the bot is unable to take the conversation further it will seamlessly handover the conversation to a physical agent who can then continue the conversation without the customer ever realizing the change. Proactive behavior is what makes a bot an intelligent assistant. Your personal banking bot can:



Prompt you about important payments



Periodically inform you about the position of



Suggest how you can save money



Inform you about financial products that are best fitted



Provide an investment portfolio update



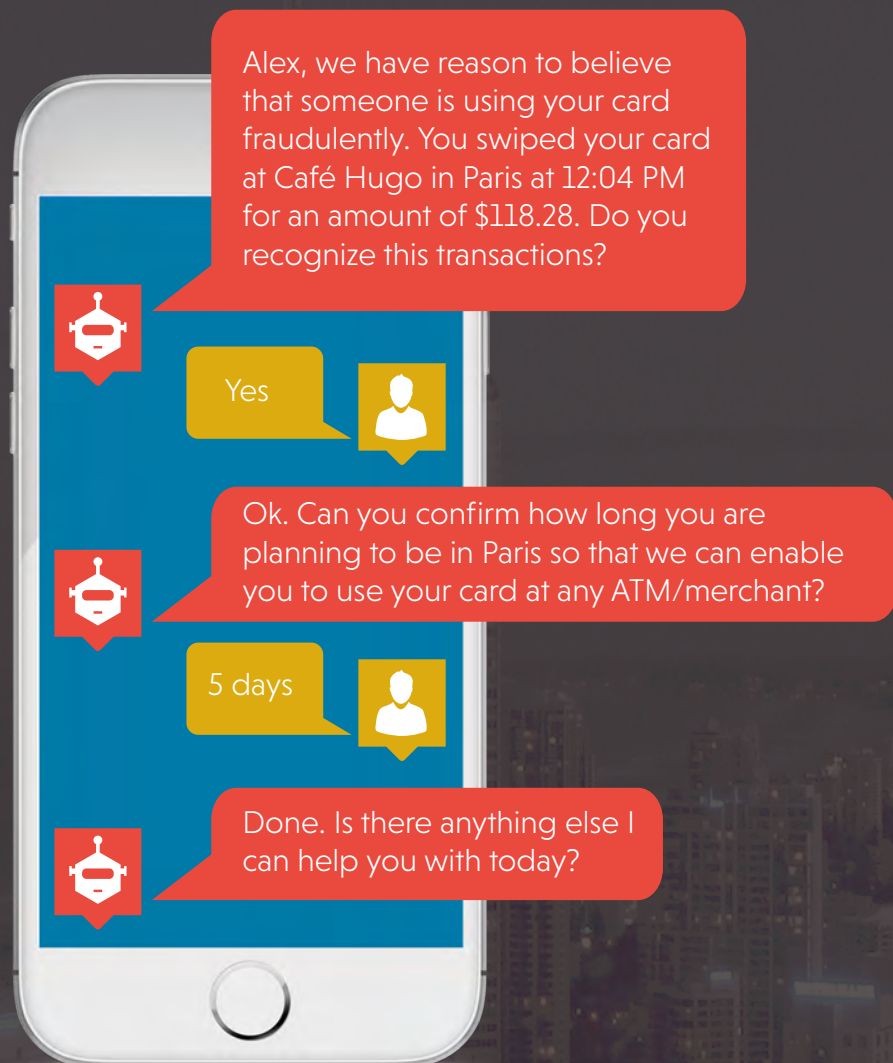
Deliver important, time sensitive

The bots can be deployed from a customer perspective in the spaces of Personal Banking, Wealth Manager, ATM Assistance, Online Sales Associate and Loan Service Agent. From the banking perspective jobs like tracking leads and initiating conversions can be taken care of by the bot. The insurance space also can hand over the duties of a Portfolio Manager, Onboarding Assistant and Claims Advisor to the bots as far as customers are concerned. The first level work of lead generation and conversion and allocating a portfolio manager according to the client profile and investment levels can also be handled by the bot.

For international travelers, when the banks detect a withdrawal on an ATM card in another country, there is an automatic fraud prevent block that is set up. This can be a nuisance because calling your bank and asking them to unblock your card can be painfully long and possibly expensive process. But for a Chatbot

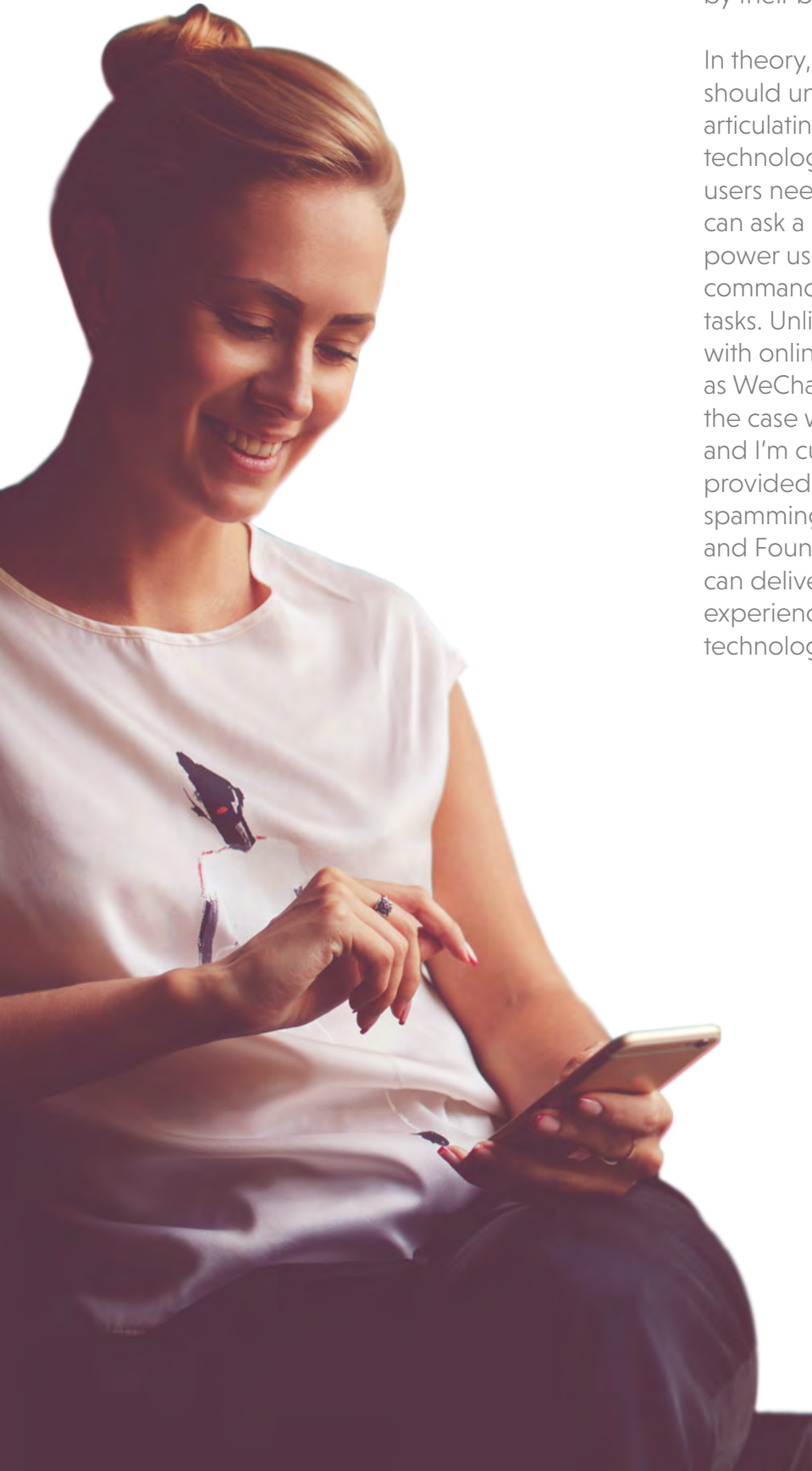
it's just another day at the office.

This is how a Chatbot would alert you



So, in under a minute the bot prevented fraud, eased your stay and also ensured you didn't have to deal with phone calls to the bank.

ADOPTION CURVE FOR CHATBOTS



While the overall rate of adoption among businesses is still nascent, along with banks many retailers across the USA have chosen to implement intelligent assistance tools on messaging platforms such as Facebook Messenger and Kik. These will help them in leveraging consumer data with artificial intelligence to perform a wide range of tasks. Like every new tech, Chatbots still have risks attached to them, but they are outweighed by their benefits.

In theory, Natural Language Processing engine should understand everything the user is articulating in their natural language and this technology is now pretty advanced. But new users need to understand the scope of what they can ask a bot. On the other hand, we have the power users who would like to use the shortest commands and shortcuts for the most frequent tasks. Unlike China where most people interact with online services using messaging apps such as WeChat, it is not clear if this will turn out to be the case with Americans. "Chatbots have potential and I'm curious to see applications evolve, provided they don't fall prey to our industry's spamming tendencies," says Susan O'Neal, CEO and Founder of Adjoy. A well deployed Chatbot can deliver huge savings and better customer experiences and the faster we adopt the technology the faster we can grow businesses.

ABOUT HAPPIEST MINDS

Happiest Minds, the Mindful IT Company, applies agile methodologies to enable digital transformation for enterprises and technology providers by delivering seamless customer experience, business efficiency and actionable insights. We leverage a spectrum of disruptive technologies such as: Big Data Analytics, **AI & Cognitive Computing**, Internet of Things, Cloud, Security, SDN-NFV, RPA, Blockchain, etc. Positioned as "Born Digital . Born Agile", our capabilities spans across **product engineering, digital business solutions**, infrastructure management and security services. We deliver these services across industry sectors such as retail, consumer packaged goods, edutech, e-commerce, banking, insurance, hi-tech, engineering R&D, manufacturing, automotive and travel/transportation/hospitality.

Headquartered in Bangalore, India; Happiest Minds has operations in USA, UK, The Netherlands, Australia and Middle East.

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