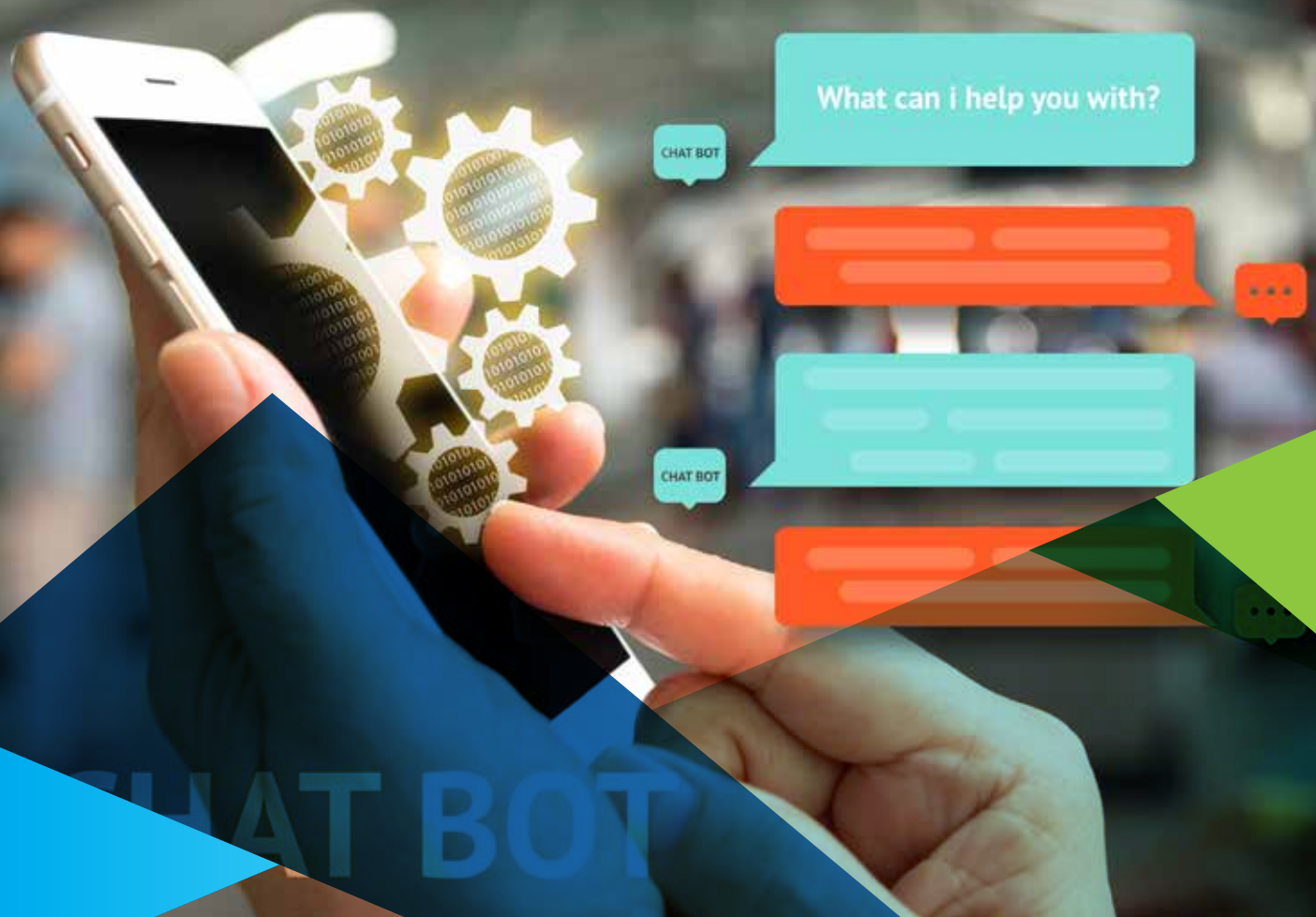


# How mCaaS - Chatbots are Disrupting the Customer- Brand Engagement Across Industries



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## Introduction

Gone are the days when customers have to approach a brand to meet their requirements. In this digitally empowered business world, brands are competing with each other to take the customer experience to the next level, where they learn the customer behavior, anticipate the customer needs and offer them the desired products and services well in advance. The digital technologies powered with **Big Data**, Artificial Intelligence and Predictive Analysis are potential research areas where many businesses are focusing on to redefine the customer experience they deliver.

At a time when brands are maintaining their digital presence with innovative options for serving the customers better, chatbots or virtual assistants are the hot topics in the field of digital marketing. Chatbots in various avatars hold the potential to redefine the customer experience on one side and marketing/ selling experience on the other. No wonder, the year 2016 is touted as the year of 'conversational commerce'.

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## Chatbots- The Next Frontier in Customer- Brand Engagement

Chatbot, or virtual assistant, is a software application which possesses the traits of human communication, interaction and emotion. It acts as an interface between the customer and the brand and holds the potential to enhance the customer experience. It enables to conduct an intelligent conversation in natural language between the human being and a computer, automates customer service, solves problems, and answers trivial questions. If the answer of the verbal or text based question is not available, it will immediately alert a human representative as well. The advancements in the fields of Artificial Intelligence and Cognitive Learning, is now taking the chatbots to the next level. These new age technologies empower chatbots to interact with various customer engagement mediums, take data input and give data as output in those mediums, with the help of various API's. The use of chatbots enables quicker real-time interactions, with information at the fingertips and customer service agents can apparently receive supplemental help from bots.

The way in which chatbots addresses customer concerns is comparatively faster than emails and telephonic conversations. If a customer issue over email takes 1 week to resolve, the chatbots can handle it in a few minutes time. Apart from this, there is always a limitation for the number of customers in which a customer service agent can

attend over the phone or over the email. However, the automated chatbots can handle more number of customers at a time and it can loop in the human assistant in the right moment. Chatbots are geo location/ time zone independent and customers can interact with them irrespective of the off hours/ business hours which increase the efficiency of using them in customer service. In addition to this, chatbots hold the technological advantage to log and store all customer data, build customer profiles, run data analytics to churn our relevant customer insights in a short span of time. Companies can use these customer insights to personalize the buying experience and optimize product development.

It can deliver updates, offers, recommendations based on the location and context of the customers as well. Chatbots provide a human face to the brand with which customers can build trust and empathy. While many of the early stage versions are not smart enough to do all these, we are quickly heading into an era where smarter chatbots can enable a rather richer and more engaging experience than the lines of queries typed in a system screen. The most desirable feature of the AI powered chatbots is the deep learning capability which makes them smarter and intelligent day by day by interacting with the customers.

## Chatbot Usages in Various Industries

**Travel:** Chatbots can become a perfect companion for a traveler by providing the right information at the right point and for easing up the hassles 'on the go', in a travel. Travel industry players can utilize chatbots to provide contextually relevant travel advisories to the customers. It can automate administrative tasks and unclog call centers to a larger extent. Learning customer preferences and providing highly personalized destination recommendations by anticipating customer preferences might be the next big revolution chatbots can bring in the travel industry.



**Retail:** AI powered chatbots hold enormous potential to disrupt the e-commerce as well as the physical shopping experience in retail industry. It can make the shopping easier by providing recommendations after analyzing the purchasing behavior and preferences of the customers, come up with relevant offers at the right time, and increase cross sell up sell opportunities. It can be built on an existing e-commerce platform and can be made available 24/7, 365 days for the customers.



**E-learning:** Chatbots can facilitate an active and engaged learning environment with live conversation and 24/7 availability. It provides personalized learning and students can access it anywhere anytime without taking the help of an instructor. Compared to current sterile e-learning systems, chatbots can be more personalized and can create a better bond between the student and the machine.

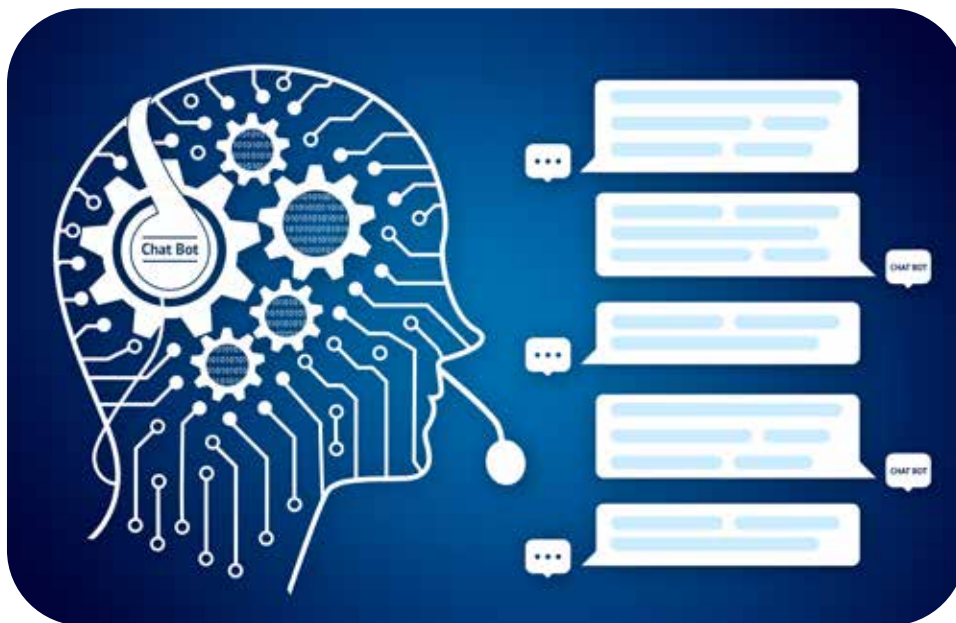


**Gamification:** Gamification and entertainment are significant areas where chatbot can play a key role as a virtual entertainer. Bots can ensure entertaining conversational experience and hook the users into a site by amusing and socially engaging them. Not in too far future, entertainment bots can anticipate the users' moods and connect emotionally and personally with them by telling stories, jokes, play music, and chat on all sorts of topics of the users' interest.



## How Chatbots Work?

Chatbots can work in mainly two ways, rule- based and smart machine based. In rule- based chatbots, when a customer access the chatbots with a query, it recognize the key words in the input and then access a data- base to give a predefined response. In this case, it uses the same rules as of an IVR or web self-service. However, with the advancement in the field of cognitive computing, deep machine learning and [Artificial Intelligence](#), Chatbots are acquiring the human intelligence capabilities to a certain extent. Those AI powered Smart machine based chatbots are not instructions based alone but adapt their behavior based on the learning they acquire from user interactions. There are a lot of research happening in this area and let us expect much more intelligent versions of chatbots with anticipative cognition capabilities in the near future itself.



## Happiest Minds' mCaaS Platform Offers AI Powered Chatbot

Happiest Minds [Managed Content as a Service \(mCaaS\)](#), a digital content brokering platform allows companies to deliver, manage and monetize their content like documents, social data, audio, video, images, etc. as per the user context. This allows smart, seamless and connected delivery of content flow for the enterprise, their end consumers, employees and business partners. One of the major features of the mCaaS platform is that it is powered with AI powered Chatbots. When a customer interacts with the brand the platform can respond back in the form of virtual assistants or chatbots with intuitive answers for customer queries. The other two options include the self-service platform and associate service platform for customer interactions with the brand.

### The Features of the Ai Powered Chatbot Application In mCaaS Platform Involves:

- Self-assembling of knowledge based on a customer Query – In Real time
- Deep learning ability with neural network framework and answering capability that enhances with time
- Ability to process Queries in Natural Language – Integrated Speech to Text capabilities; Leverage of multiple NL and ML Libraries
- Text Summarization, Video sentiments analysis, Image processing
- Voice based guidance, further enhancement through AR visuals
- Real time scoring based on User behavior and journeys, apart from traditional data
- Predictive conversation based on customer behavioral analytics

## Conclusion

We are going to witness an era of increased human- machine interaction that too in a natural plain conversational language, and this can make drastic changes in the customer service arena. If the brand- [customer interaction](#) is more there will be more room for building the trust between them. The philosophy of chatbots is based on this idea. Chatbots provide an opportunity for more frequent and personal interactions with the customers, which enable them to be more loyal towards the brand. As the AI technology advances and the chatbots become more empowered to offer extensive personalization, greater usability and better language processing, let us expect that the future generation will be heavily dependent on digital assistants for its day to day activities. We can also expect chatbots to be getting embedded in interconnected devices in the future, apart from smart phones and other mobile devices. This will fundamentally transform the human interactions with the digital platforms and redefine customer experience space by taking it to the next level of personalization. On the darker side, as chatbots collect and store a large amount of customer data including confidential and sensitive information, it can pose huge threats to data privacy and cyber security. Cyber criminals can misuse chatbots to trick people to access phishing emails or to collect their sensitive information and use it for their malicious motives. Enterprises especially players in the fields of banking, retail, hospitality, health care etc. have to be extra cautious about data protection while implementing chatbots.

Gartner technology predictions 2016 reveals that "by year-end 2018, customer digital assistants will recognize individuals by face and voice across channels and partners". It is no longer a distant dream where customers interact with a brand in a similar manner they interact with a close friend or family. As Artificial Intelligence and robotics start dominating the business world, the interactions of humans will be more with AI based cognitive systems and most of the human decisions and actions will be heavily dependent on cognitive systems. The human - machine interaction through chatbots will then see a transition from the current text, voice- based systems to human gesture- based communication. No doubt, days are not too far, when the whole business world might be waiting for the blink of your eye. Let's wait and watch for interesting updates in this arena.

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## About the Author



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Abhisekh Kumar is Senior Technical Manager and a Digital Platform Architect in the Digital Transformation Space. He has 12+ years IT industry experience, especially in the areas of Enterprise Solution Architecting, Cloud Solution Architecting, Enterprise Application Integration and in Leading the Center of Excellence for GTM. He is currently responsible for the end to end enablement of Smart Enterprise Digital Transformation Platforms- starting from market making to execution of business around the strategic Digital Platforms and Enterprise Applications. He is a thought leader and also assists freelancers on cloud & digital business platform for the digital transformation enablement."

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### About Happiest Minds Technologies:

**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.

**To know more about our offerings. Please write to us at [business@happiestminds.com](mailto:business@happiestminds.com)**

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