



## CONVERSATIONAL AI - THE NEW ART OF SURVIVING IN BUSINESS

The most engrossing and ubiquitous topic which everyone is talking about is Conversational AI. The unanimous choice in every technology forecast, a keynote topic across business, marketing, and IT conferences, a core capability claimed by software vendors of all sizes and specializations, and the recipient of millions in venture funding -- Conversational AI is making rapid inroads into connected home, mobility, and workplace, as demonstrated at this year's CES (Consumer Electronics Show, Las Vegas).



## What is Conversational Artificial Intelligence a.k.a AI?

A real conversation always contains an invitation. You are inviting another person to reveal herself or himself to you, to tell you who they are or what they want.

-- David Whyte



Conversational AI is a method of giving a conversational experience that uses digital and telecommunication technology to replicate discussions with real people.

The future of customer and employee interactions is conversational AI. Designing affordable digital experiences is now

possible because of rapidly evolving use cases in automation, artificial intelligence (AI), and natural language processing (NLP). Customer communications with enterprises increasingly mirror in-person conversations with employees, now that information may be meaningful, straightforward, and natural.



## Key Technology components driving Conversational AI

1. **Natural Language Processing (NLP):** Ability to “read” or interpret human language content and comprehending complex sentence patterns as opposed to simple keyword “triggers”.
2. **Intent Recognition:** Ability to understand what user is requesting even if the sentence or phrase is not clear.
3. **Entity Recognition:** Ability to pull data from web or database using APIs, run conditions and alert the dialog manager
4. **Voice Optimized Responses:** Ability to engage in conversation in human like manner and show emotions and deliver experiences to its user
5. **Dynamic Text to Speech:** Ability to produce speech from written text that sounds natural and to support a variety of languages, voices, and accents.
6. **Machine Learning:** Ability to learn to respond better to its user by examining human responses
7. **Contextual Awareness:** Ability to understand conversation, translate, recall, and memorize information of the conversation. It is necessary for natural, human-like back-and-forth conversation.

## Engaging Customers through Conversational AI



- a) **24/7 Availability:** The most significant advantage of conversational AI is the capacity to reply to client queries at any time.
- b) **Customers like texting:** The Insight Partners predicted that 'Intelligent Virtual Assistant market growth will be worth \$47.57 Bn globally by 2028, driven by high adoption of Chatbots.' Every company has now chatbots installed in their website or they are considering one. As more and more customers start expecting to have a direct way of communicating to the company, it is good to have a touchpoint on a messenger.
- c) **Engagement:** Conversational AI keeps customers engaged. It keeps users in the loop by attempting to provide a solution before they call the hotline number. It keeps customers engaged with the chatbot, which increases retention.
- d) **Scalability:** Conversational AI is scalable and has the capacity to handle huge volumes of questions even when there is a sudden rise in query volume without the need for further hiring of personnel, thus lowering costs.

## Pros of using conversational AI:

Organizations may offer unique, tailored experiences that foster relationships with their clients by utilizing conversational AI. Each connection has the potential to feel like a personalized, context-aware discussion that is influenced by previous ones.



**Boost client acquisition**



**Reduce Churn**



**Boost sales per person**



**Reduction in serving cost**



**Enhance employee satisfaction**



## Market Size and Impact

The global business value obtained from AI is anticipated to increase rapidly because of early advantages from the adoption of conversational AI.

- Increase in NPS scores: Organizations can increase their NPS scores by effectively utilizing conversational AI by providing quality services to their customers.
- Increase in sales conversion rates: Sales can be increased in any organization with purposeful application of conversational AI to their sales process

It is expected that conversational AI will grow up to AUD 22.6 billion by 2024. Spending on cognitive and AI systems will increase by more than three times to \$77.6 billion in 2022, according to a new update to the International Data Corporation (IDC) Worldwide Semiannual Cognitive Artificial Intelligence Systems Spending Guide. This is up from the \$24.0 billion forecast for 2018. For the predicted period of 2017–2022, the compound annual growth rate (CAGR) will be 37.3%.

According to a recent report from Juniper Research, the operational cost reductions from chatbot used in banking would increase from an expected \$209 million in 2019 to \$7.3 billion globally by 2023.



## Applications of Conversational AI in Various Domains:



### Education

- A knowledgeable instructor for a college-level course.
- Information and services about the educational system provided on behalf of the academic personnel.
- Using voice-based agents to enhance a lab's automation and security.



### Bank/Finance

- Providing financial-product sales.
- Responding to inquiries regarding a customer's account, bill payment, credit card payments, and meeting schedule



### Healthcare

- Giving advice to consumers on their employments or when they experience any medical issues
- Give information about diabetic diets to patients etc.



### Travel/Tourism

- Interaction with customers and give Information about tours and travels
- People can book tickets, make reservation for a hotel using AI



### E-Commerce

- Using social media to deliver an online experience and provide client service
- Accepting an order to making a payment with the help of AI has been made easy
- Talking about the preferences and giving and suggesting choices to the customers

## Few Conversational AI products available in Market:

Speech recognition, Chatbots, Machine learning algorithms, Mobile apps and smartphones, Image recognition, Automation, Algorithms and Speech synthesis.

Conversational AI, in my opinion, is critical in shaping the rapidly evolving human engagement with machines. Conversational AI is currently capable of doing everything from listening to understanding users, intelligently replying to their enquiries, and promptly resolving customer problems. However, it is not restricted to these as it evolves with current conditions and expands applications to every domain. The advancement of NLP and Deep Learning will provide a plethora of options for chatbot platforms to engage and become a new face of development for the betterment of the world.



## Conclusion:

Conversational applications are already becoming as critical to a business as its website is today, with everyday speech being the norm of interface. Users will no longer need to tell technology what they like or dislike, technology will have learned intuitively. Search will deliver results based on a user's personal preferences, external factors, and third-party partners. No more million-result searches, just answers.

As the future unfolds, the controlling factor to interaction between humans and technology will be the conversational element. It will be instrumental for customers to find and interact with organizations and it will be critical for enterprises to develop and improve their customer experience.

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