

O'Reilly Strata Data & AI Superstream

Conversational AI In The Real World

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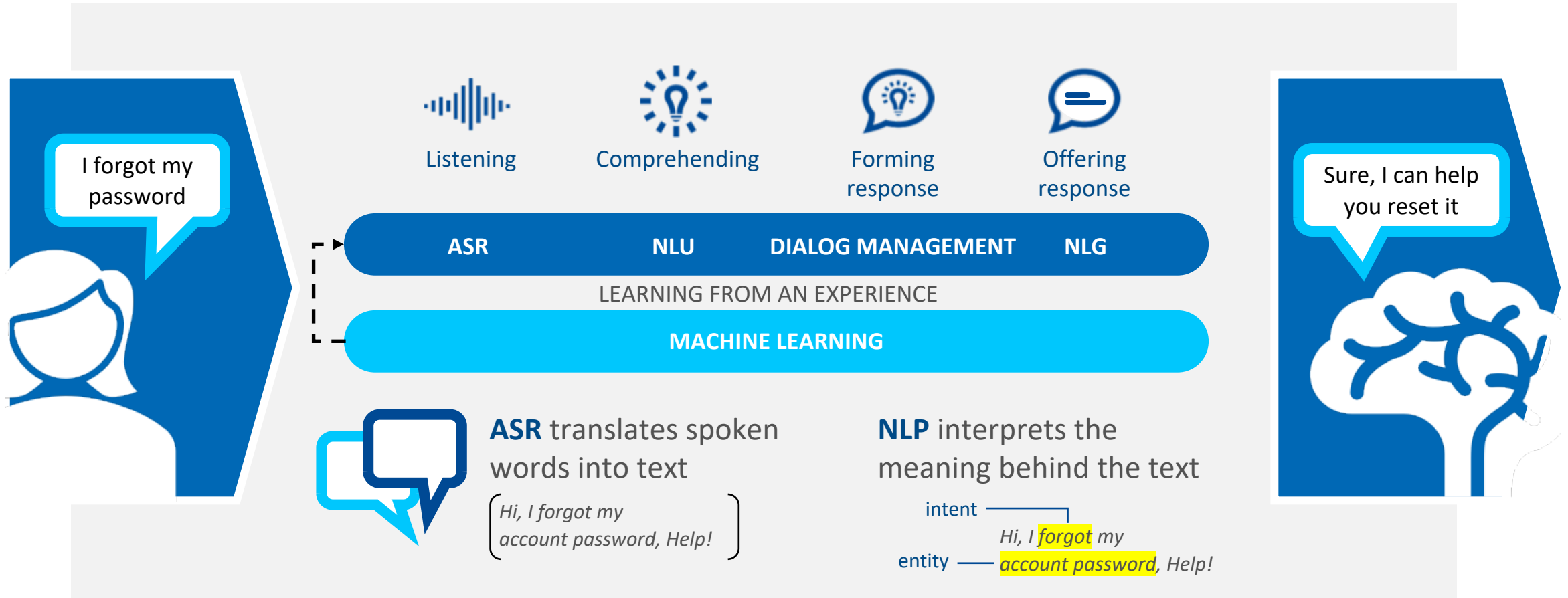


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Agenda

- What is Conversational AI?
- Current AI Landscape
- The Promise of Conversational AI
- Enterprise Customer Service
- Real World Use Cases
- Summary
- Q&A

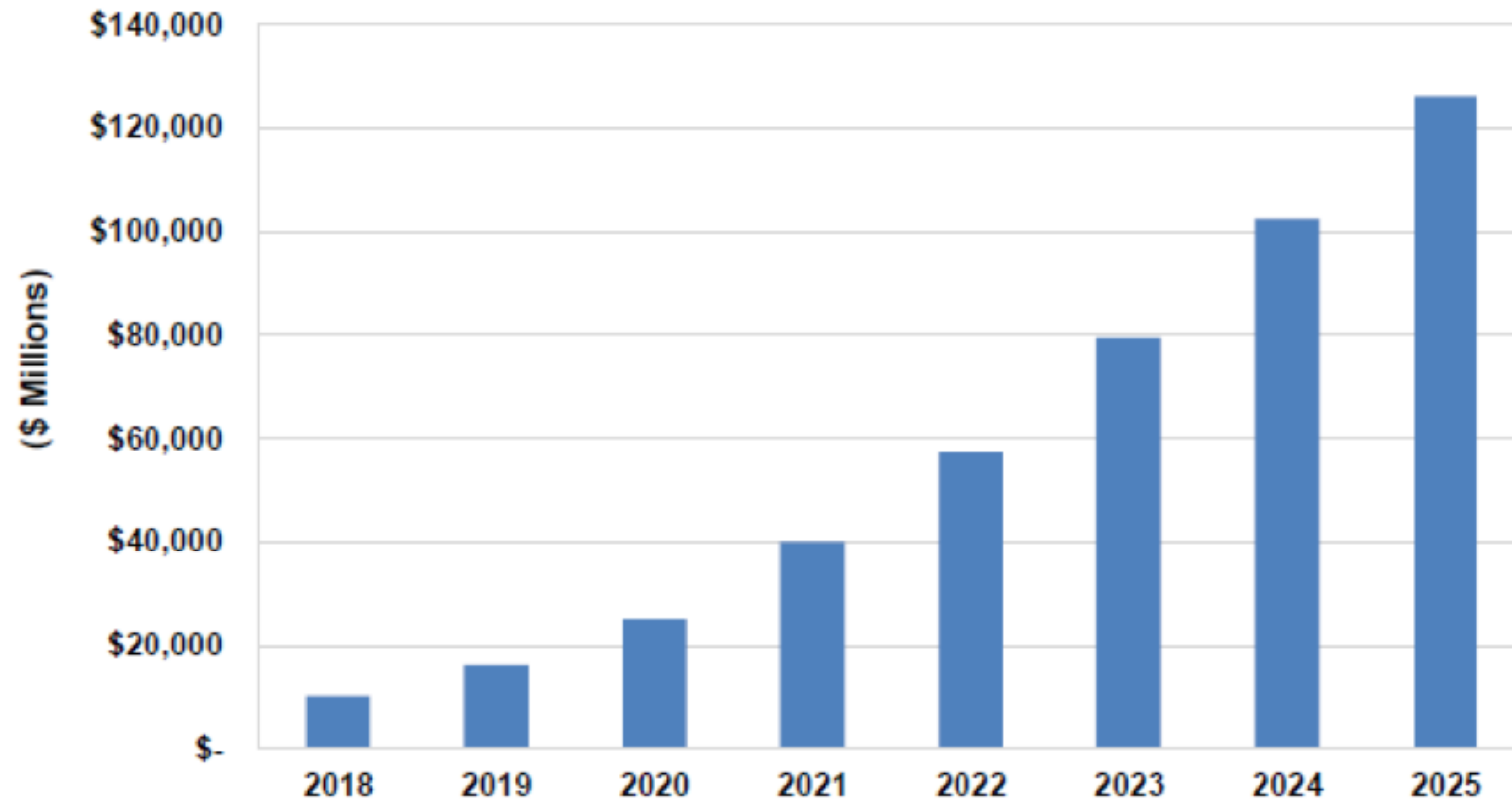
What is Conversational AI?



DEEP LEARNING makes the solution more intelligent with every interaction

Current AI Landscape

Annual AI Software Revenue, World Markets: 2018-2025¹

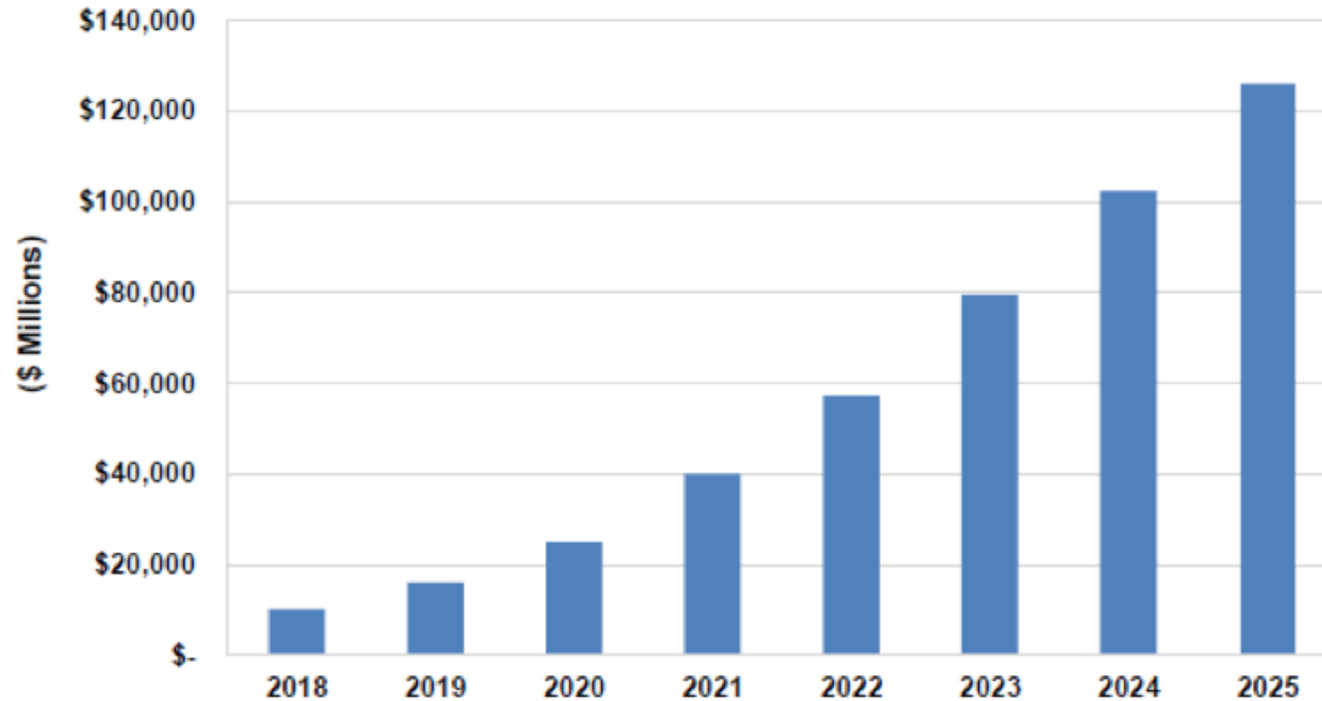


(Source: Tractica)

1. Source: Tractica Artificial Intelligence Market Forecasts Report Q4 2019

Current AI Landscape

Annual AI Software Revenue, World Markets: 2018-2025¹



(Source: Tractica)

"By 2021, more than 50% of enterprises will spend more per annum on bots and chatbot creation than traditional mobile app development" - Gartner²

"By 2025, customer service organizations that embed AI in their multichannel customer engagement platform will elevate operational efficiency by 25%." - Gartner³

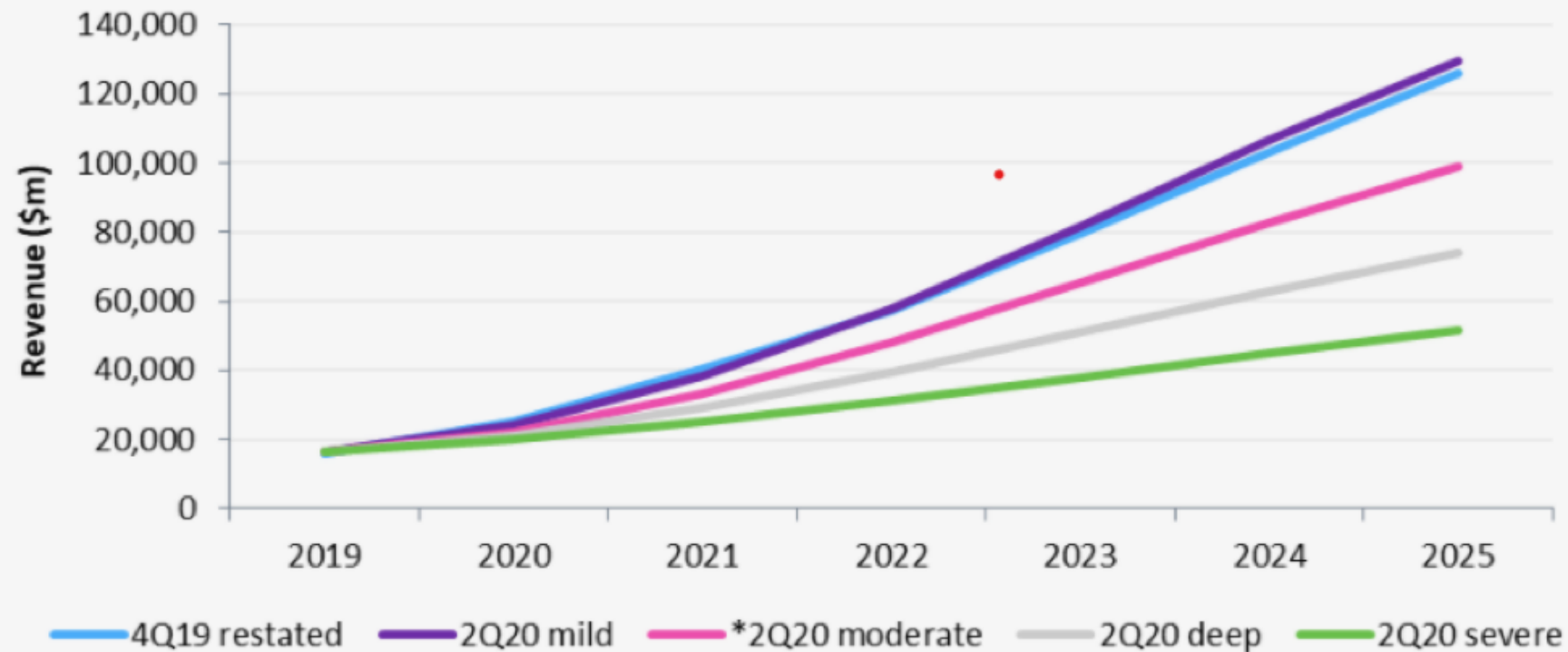
1. Source: Tractica Artificial Intelligence Market Forecasts Report Q4 2019

2 <https://www.linkedin.com/pulse/chatbot-statistics-2020-beyond-andy-peart/?articleId=6668475355898118144>

3. <https://www.analyticsinsight.net/navigating-covid-19-conversational-ai/>

The Promise of Conversational AI

AI software revenue forecast scenarios, world markets: 2019–25



*2Q20 moderate scenario reflects Omdia's base forecast for this report. If scenario is not indicated, this is the forecast shown in tables and charts.

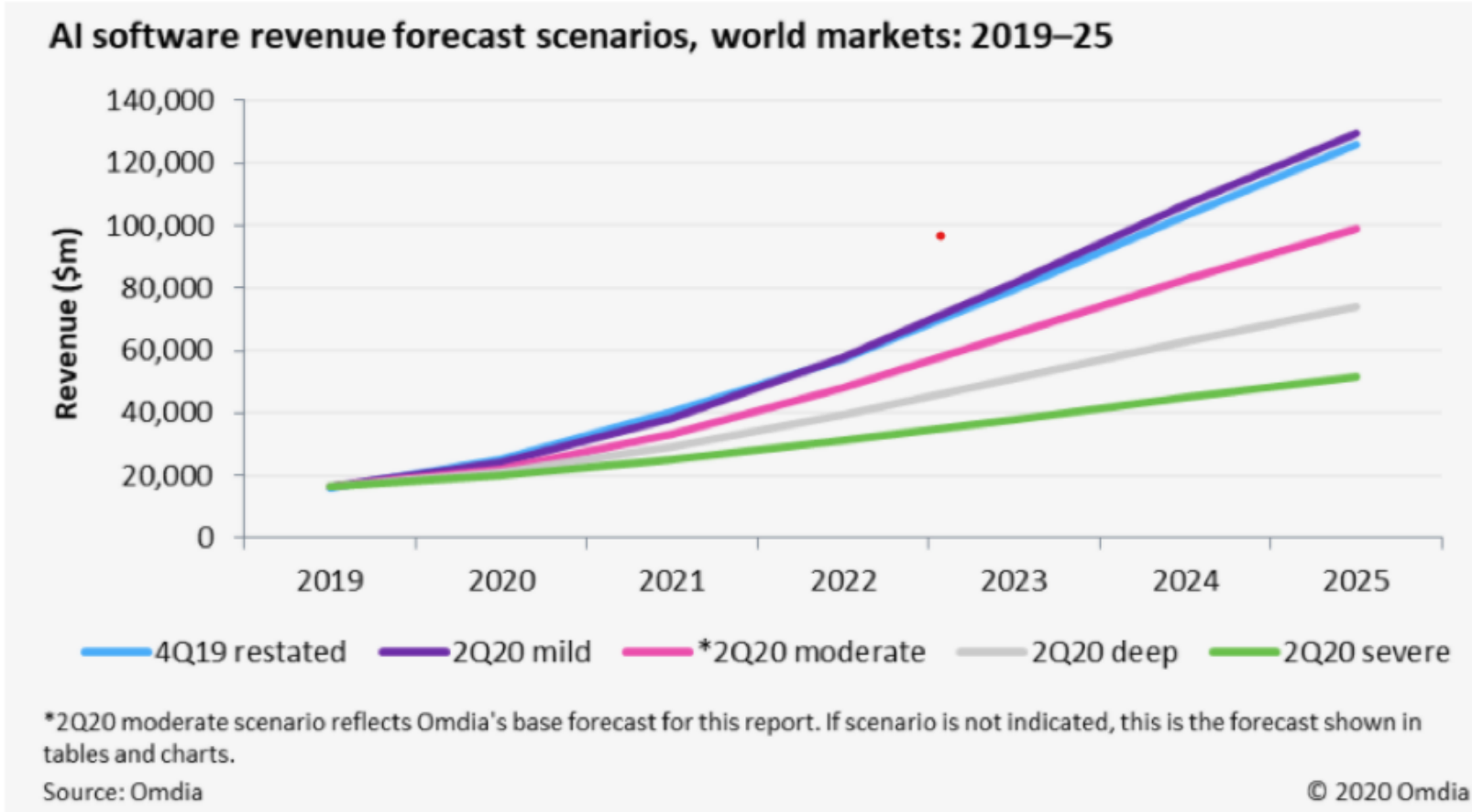
Source: Omdia

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"The worldwide market for artificial intelligence software will expand to \$98.8 billion by 2025, rising by a factor of six from \$16.4 billion in 2019—despite the varying effects of the COVID-19 pandemic across different industries." - Omdia.

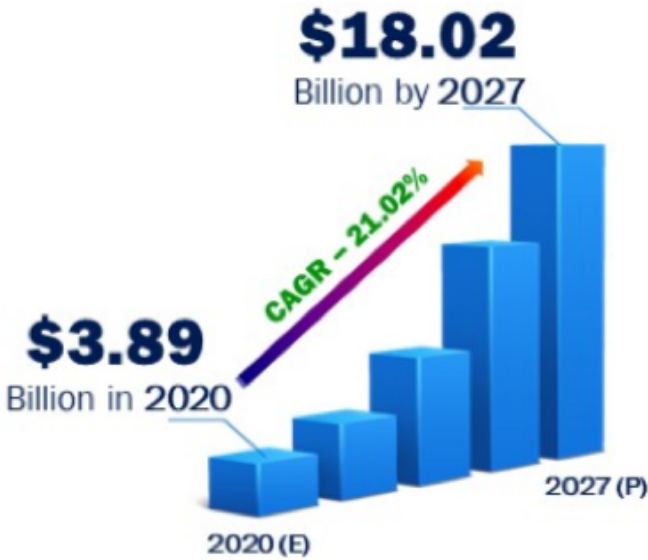
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The Promise of Conversational AI



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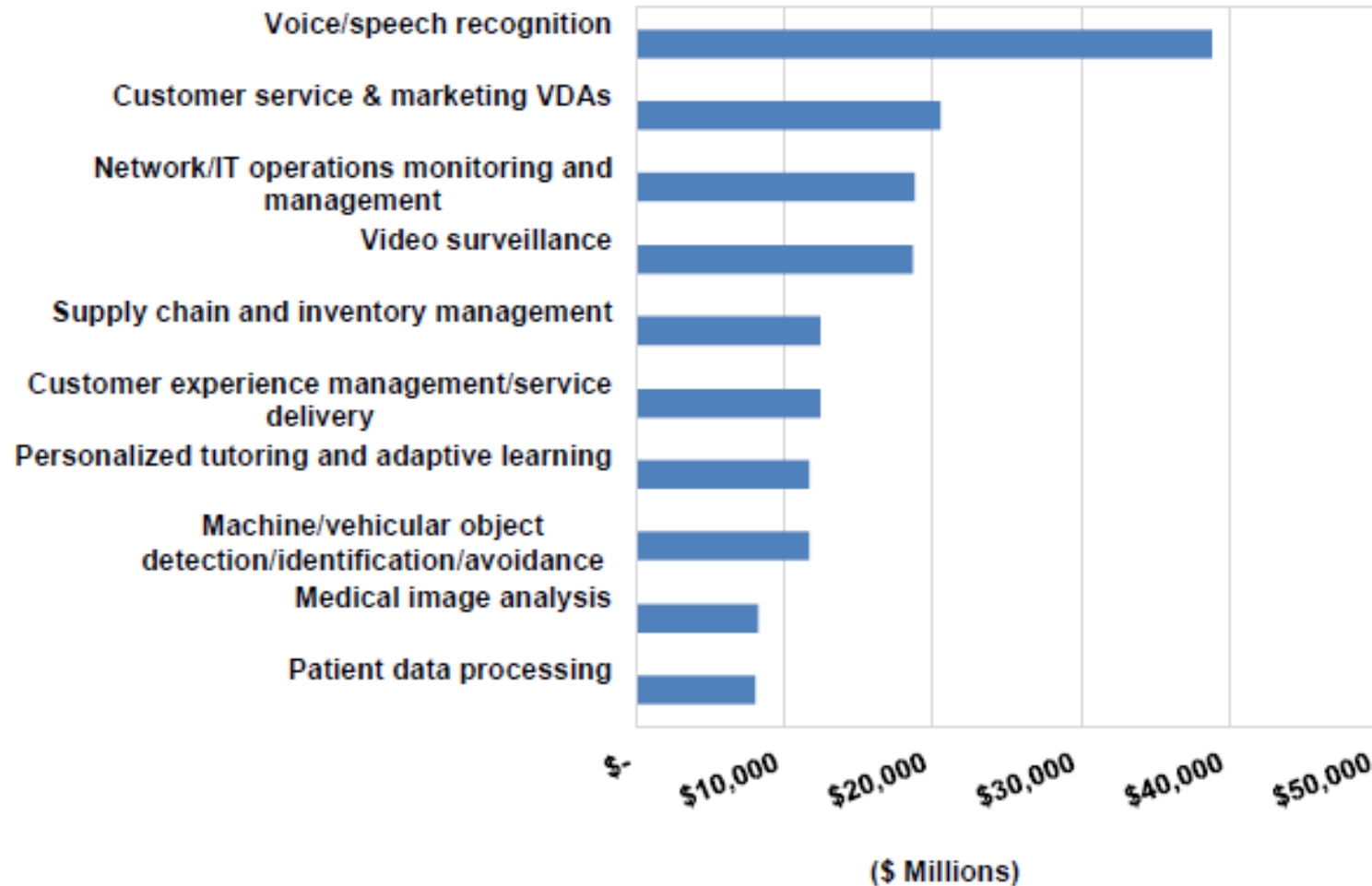
Global Conversational AI Market, 2020-2027



[Link](#) to Source

Top AI Use Cases

Cumulative AI Software Revenue, Top 10 AI Use Cases, World Markets: 2018-2025¹



"5 billion hours projected time savings for businesses and consumers from chatbots by 2023."
- Juniper Research¹

**Voice/Speech
recognition
& Customer Service
are the Top 2 use cases**

\$60B market

1. Source: Tractica Artificial Intelligence Market Forecasts Report Q4 2019

2. [Link](#) to source

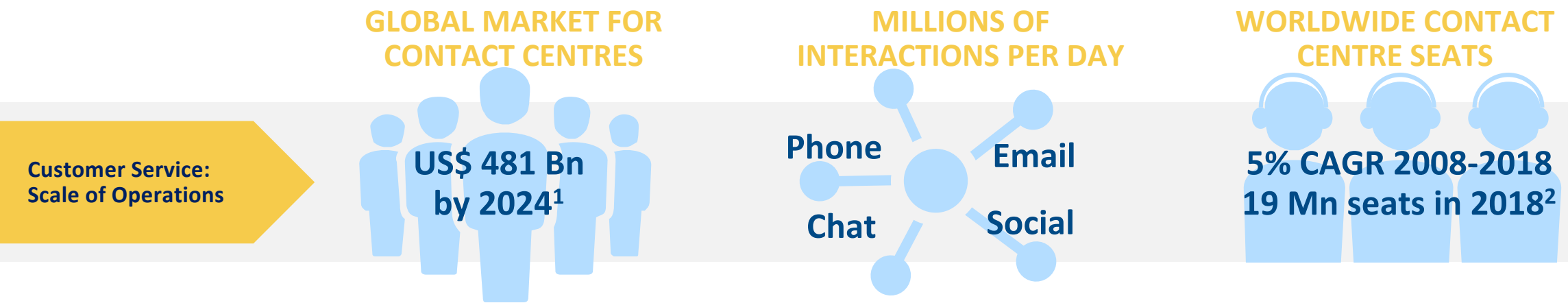
Key Adoption Drivers

- Smart consumer devices & appliances
- Demand for AI-powered customer service
 - Traditional contact center models cannot scale
 - Multi-channel engagement & deployment
- Virtual Digital Assistants provide many benefits
 - Lower wait times, Improved self-service, Less \$/touchpoint
- COVID-19
 - Accelerated pace of digitization
 - Protect against disruption

“By 2023, 30% of customer service organizations will deliver proactive customer services by using AI-enabled process orchestration and continuous intelligence”
- Gartner

“AI-enabled Contact Centers are the next phase for service organizations”
– DMG Consulting LLC

Enterprise Customer Service



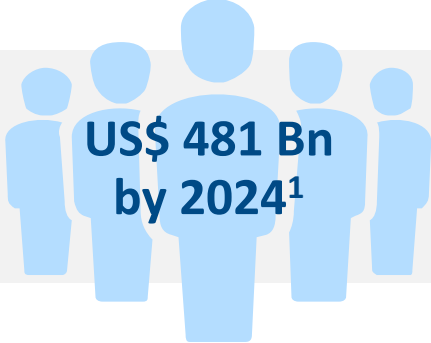
¹ Source: www.strategyr.com

² Source: DMG Consulting LLC: Directional use only

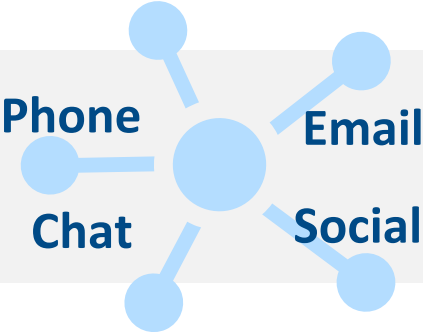
Enterprise Customer Service

Customer Service:
Scale of Operations

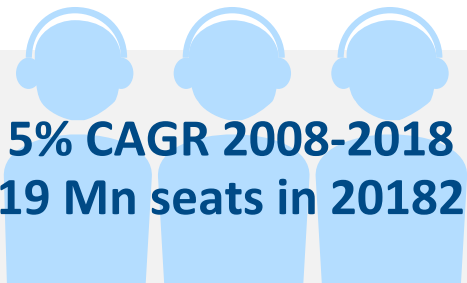
GLOBAL MARKET FOR
CONTACT CENTRES



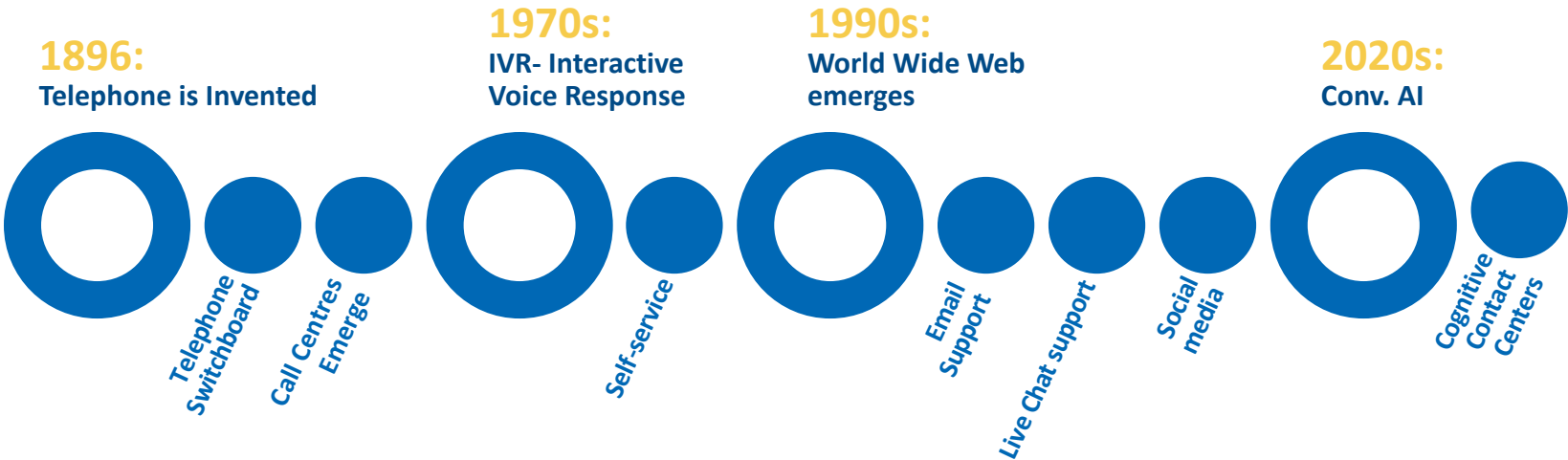
MILLIONS OF
INTERACTIONS PER DAY



WORLDWIDE CONTACT
CENTRE SEATS

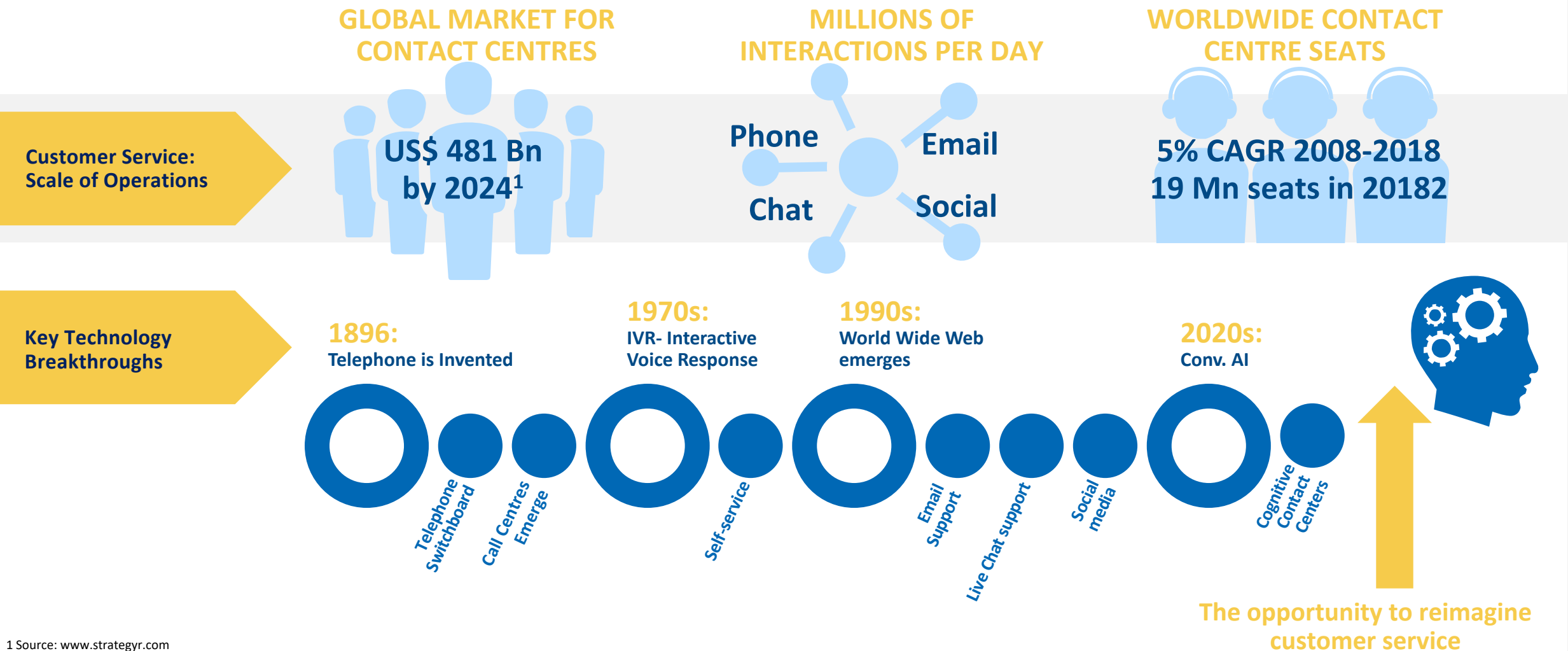


Key Technology
Breakthroughs



1 Source: www.strategyr.com
2 Source: DMG Consulting LLC: Directional use only

Enterprise Customer Service



¹ Source: www.strategyr.com

² Source: DMG Consulting LLC: Directional use only

Intel AI Builders & Conversational AI



Real World Use Cases

Telefonica



Business Challenge

- Large Spanish telco, with presence in 15 countries
- Goals:
 - Improve Customer Experience
 - Optimize Costs
 - Increase Efficiency
- [Verbio](#) is a global leader in Conversational AI solutions & Intel AI Builder member



Solution

- Digital voice agents introduced in 2018, partnering with Verbio.
- E2E Conversational AI pipeline for Spanish-speaking clientele
 - AI & Speech Recognition SW on Intel servers
- Amelia now handles 100% of mobile phone traffic.



Impact / Benefit

- 44% decrease in call abandonment rates
- Customer satisfaction levels retained
- Accurate prediction of best-next-action by customer
- Improved customer experience
- Lower operating costs



Business Challenge

- 2nd largest Spanish bank, with presence in 31 countries & 51M customers
- Goals:
 - Improve Customer Satisfaction
 - Technology-Driven Differentiation
 - Scalability Across Regions
- [Verbio](#) is a global leader in Conversational AI solutions & Intel AI Builder member



Solution

- BBVA deployed Verbio's NLP-based automated solution
- Entire conversational AI pipeline, from ASR to NLP to TTS, was deployed
- Considered to be one of the most innovative voice interaction systems in the region
- 1.8M calls processed per month, with 3000 simultaneous calls



Impact / Benefit

- Lower avg handling time per call
- Perceived call quality improved from a rating of 6.5 to 8 (out of 10)
- Improvement in First Call Resolution
- Several \$\$\$ savings from system everyday¹

¹ Data provided by partner, not verified by Intel

National Health Authority of India



Business Challenge

- [Yellow Messenger](#) - conversational AI platform supporting 100+ languages and 1B+ conversations.
- NHA implements India's flagship public health insurance program
- Challenges:
 - Low staffing & high call volumes during pandemic
 - Misinformation causing chaos



Solution

- NHA deployed an AI-based "Corona Helpdesk"
- Web-based COVID-19 Digital Assistant that identifies intent & provides relevant information
- Deployed in English and Hindi
- Automated, comprehensive conversational flow covering a range of topics



Impact / Benefit

- Several thousand users engaged in just a few weeks
- 92% of interactions completed successfully
- 5 User Journeys mapped

Large Insurance Company



Business Challenge

- One of the most prominent Life Insurance companies in Asia
- [Gnani.ai](#) - conversational AI startup + Intel AI Builder partner
- Current process required significant manpower & was difficult to scale
- Goals:
 - Reduce operating costs
 - Increasing scale
 - Retaining customer experience



Solution

- Voice-based interactive system to automate interactions
- Real-time communication in 2 languages
- Customized E2E conversational AI solution in ~2 weeks
- 100,000 calls processed in the initial 8 weeks.



Impact / Benefit

- Comparable call answer and completion rates to agents, with greater # of calls processed.
- Quick and efficient scaling of operations during peak times, and at short notice.
- Lower cost of operations,
- More enriching and value-adding tasks performed by human agents

Summary / Recap

- Conversational AI market is poised for growth and broad scale adoption
- Enterprise Customer Service is the most common use case, using chatbots & voice bots
- COVID-19 is accelerating the pace of digital transformation
- Companies across a range of industries have benefited from deploying conversational AI solutions with our partners

Thank you!

