

COGNIGY

Guide

AI Agents for Utilities





Table of Contents

Introduction	4
What are AI Agents?	5
What AI Agents Do	6
What AI Agents Don't Do	6
Why AI & Why AI Agents	7
Filling the Labor & Skills Gap	8
Improving Agent Experience & Reducing Churn	9
Out-of-the-box Utilities Use Cases to get started	10
Pretrained Utility Skills	11
Example Use Case from an Energy Provider	12
Overall Benefits of AI Agents in Numbers	13
AI-Powered Customer Service Processes	14
Case studies	15
Conclusion	16

Introduction

Customer service these days can often feel like juggling chainsaws...in a burning building... with your boss watching. OK, maybe it's not that bad. Still, everywhere we look, we hear about rising customer expectations, churn rates increasing, a growing labor gap, increasing inquiry volumes, and KPIs resistant to upward movement.

At the same time, the utilities industry is surrounded by digital transformation on all sides, from smart grids, IoT technology, electric vehicles, and more. The truth is: there's simply no future in which customer service becomes simpler, demand goes down and technology decreases.

The good news is that AI is now capable of delivering on promises that were prematurely made in the past. It's time for AI to handle routine, repetitive tasks, allowing humans to focus on what they do best. For too long, companies have been misallocating resources, with humans performing tasks better suited for machines. Contrary to those crying wolf, AI is not heralding an age of layoffs, but rather restoring the natural order. High-volume, low-complexity tasks are now assigned to machines, where they belong.

Humans are at the center of customer service, both on the customer and the company side. That's why both humans and AI have to work together. AI Agents constitute a virtual workforce that can handle millions of voice and digital inquiries every year, in any language, on any channel for both informational and transactional issues.

Whether it be meter readings, help at a charging station on the highway, or simple tasks like contract changes, AI Agents are the only path forward to scaling customer service amid a changing and digitizing industry. Let's dig into why.



What are AI Agents?

An AI Agent is simply a useful metaphor for a cutting-edge AI-based software solution. They are designed to interact with customers and human agents in a natural, human-like manner and ultimately get things done. They consist of two main components:

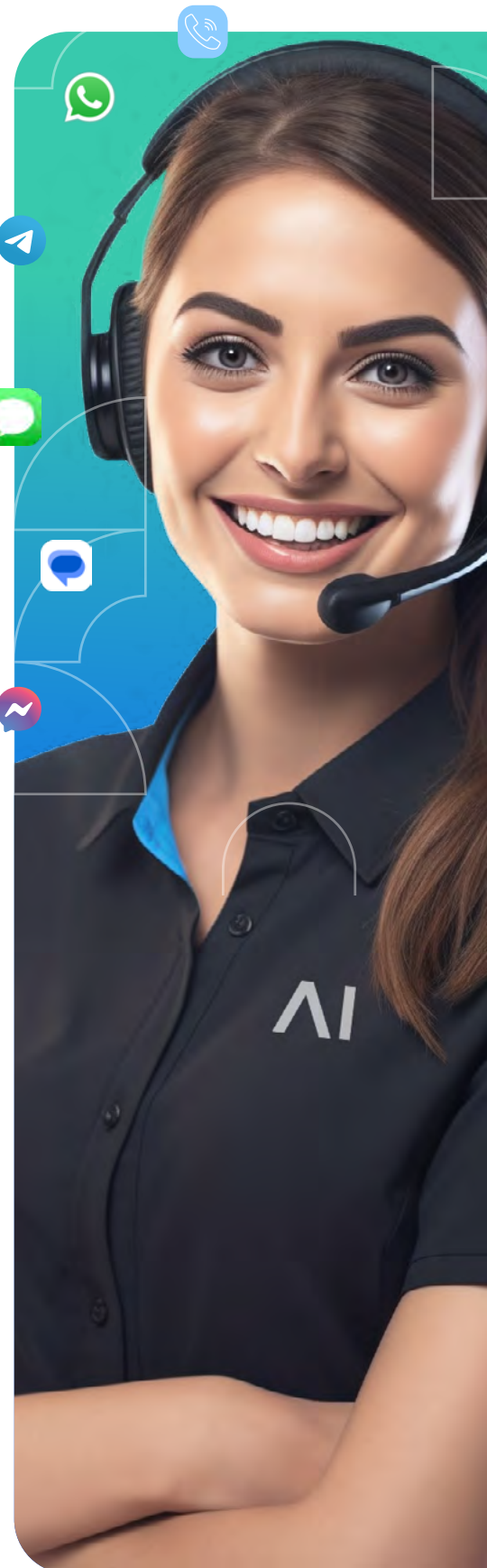
Conversational AI:

This allows the AI Agent to engage in real-time dialogues with users. It understands user inputs, processes them, and responds in a way that mimics human conversation. Conversational AI is adept at understanding context, managing multi-turn conversations, providing service across multiple channels, even within the same conversation, and providing relevant responses. Critically, it is integrated into your backend systems and can actually get things done, i.e. carry out service processes either partially or end-to-end.

Generative AI:

While Conversational AI provides the business logic, structure, and guard rails, Generative AI produces unique, contextually relevant content on the fly. It's not limited to pre-programmed responses but can generate answers, and solutions, or even create content. With Conversational AI being the first and only layer the customer interacts with, it can curate responses and use specific prompt templates to ensure consistent performance and maximize safety from the LLM.

Together, these technologies empower the AI Agent to deliver a seamless, personalized, and efficient user experience. Whether it's answering queries, providing support, or guiding users through complex processes, an AI Agent powered by both Conversational and Generative AI ensures all customer interactions are fluid, relevant, and indistinguishable from their human counterparts.





What AI Agents Do

- Close the gap in qualified staff
- Tackle narrowly scoped tasks
- Perform specific tasks well, over and over with zero attrition
- Increase overall automation rate
- Reduce costs
- Reduce tier 1 and repetitive tasks for human agents

What AI Agents Don't Do

- Replace people, in fact they're needed more than ever, and for tier 2 help
- Replace your customer experience with technology
- Require benefits or expensive training
- Get tired of repetition and experience burnout
- Require technical skills or development from you

What Can AI Agents Do For You?



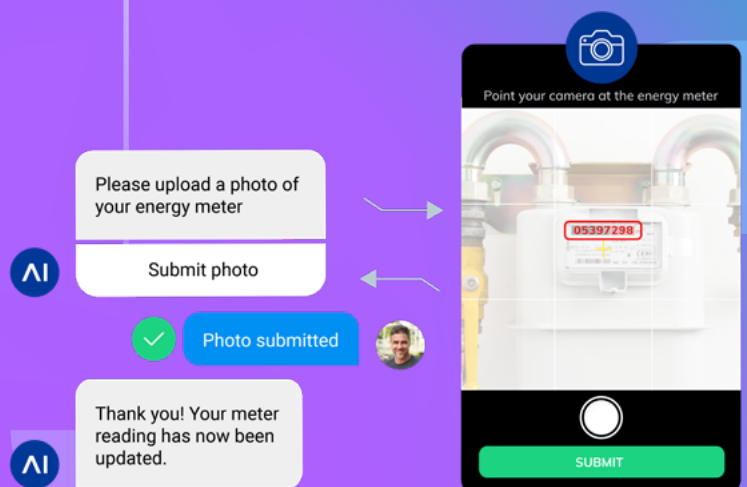
Work along-side Human Agents



Handle Voice & Chat in 100+ Languages



Know your Processes, Products, Services & Customers



Why AI?

The utilities market is continuing its shift towards renewable energy, more efficient resource management, integrated technologies, IoT for smart meters and grids, and the electrification of transportation. What a mouthful! All of these impact and complicate customer service operations. Utility companies must now manage a more dynamic grid, handle vast amounts of data from connected devices, and address new customer issues related to EVs. This demands robust, scalable customer service solutions that can easily integrate with a range of information systems, provide real-time support, and continue to adapt to evolving customer needs.

There is no single solution. But AI should be part of any solution.



Why AI Agents?

Moving forward, why should you hire AI Agents? Well, first ask why you hire humans. Is it to do manual, low-value repetitive tasks perhaps? It may sound silly, but for many businesses, the answer is actually yes. However, it shouldn't be. AI excels at handling high-volume, low to medium-complexity, and repetitive tasks that are relatively consistent. Humans, on the other hand, excel at high-complexity tasks, edge cases, and those requiring emotional intelligence. Here are a few more reasons why the utilities industry is turning to AI agents right now, though this list is by no means exhaustive.

Close the labor gap in contact centers

Improve efficiency metrics

Reduce labor costs from over hiring due to inefficient operations

Increase customer satisfaction metrics

Handle the same or rising inquiries with the same staff level



Filling the Labor & Skills Gap

The labor pool for contact centers continues to be limited, leading to ongoing difficulties in finding suitable candidates. Concurrently, there's been a resurgence in churn rates, hovering around 31% in 2024 according to a recent study conducted by Metrigy. However, the challenge isn't just in sourcing personnel; it's also about finding skilled individuals for customer service roles. This means fewer available hires with lower skill levels, compounded by a higher rate of attrition among existing agents.

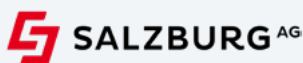
AI Agents are a highly sustainable solution for filling this gap created by company growth and higher inquiry volumes. AI Agents can take over high-volume low-complexity tasks almost immediately, massively reducing the workload for human agents, even through partial automation. They're also online 24/7/365, in any language and on any channel you choose.



AI Filling Gaps in Company Growth and Lack of Agents

Source: Metrigy Research Corp

Case Study



Utility company

Providing energy, telecom, and transport infrastructure

Challenge:

Enhance customer service for its over 450,000 customers

Solution:

Multimodal Digital Chat AI Agent – LEA:

- Powered by GenAI & Knowledge AI
- 160,000 Automated Chats a Year
- 89% User Satisfaction Rate



Improving Agent Experience & Reducing Churn

With labor difficult to source, AI Agents can not only close the gap but also help to prevent it from appearing in the first place by reducing churn. Here are a few examples:

Agent Challenge	How AI Agents can Help
Excessive service requests	Increase containment rate via self-service and automation
Intense workload	Fully and/or partially Automate Tier 1 requests.
Tool/App overload	Streamlined workspace with Agent Assist proactively pulling info from other systems so agent doesn't have to
Manual post-call work	Automated summarization & case creation using transcript and CRM data.
Complex processes	Simplified digital processes via modeling and automation with AI
Information overload	Real-time monitoring with proactive knowledge lookups, suggestions, and processes via AI



Out-of-the-box Utilities Use Cases to get started



BENEFITS

Intelligent IVR / Routing

- ☑ Reduced Hold times
- ☑ Fewer transfers
- ☑ Higher routing accuracy
- ☑ Lower AHT
- ☑ 24/7 Availability
- ☑ Increased automation

FAQS

- ☑ Reduced tier 1 inquiries, Reduced agent workload Personalized, contextual answers
- ☑ Increased automation
- ☑ Higher containment rate
- ☑ Lower to cost to serve

Warm Handover

- ☑ Lower customer effort,
- ☑ Decreased AHT
- ☑ Lower agent error rate
- ☑ Reduced agent workload
- ☑ Lower cost to serve

Self-Service

- ☑ Higher FCR
- ☑ Higher containment rate
- ☑ Lower agent burden
- ☑ Lower customer effort
- ☑ Increased CSAT



Pretrained Utility Skills



ID&V



Meter Readings



Address Change



Billing Questions



Route to Queue



Start/Stop Service



Usage Questions



Outage Notifications



Agent Copilot



Transcribe Call



Write Call Summary

Available Everywhere



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Example Use Case from an Energy Provider

E.ON

With over 50 million customers across 15 countries in Europe and multiple subsidiaries, E.ON is one of the largest energy network and infrastructure operators in Europe.

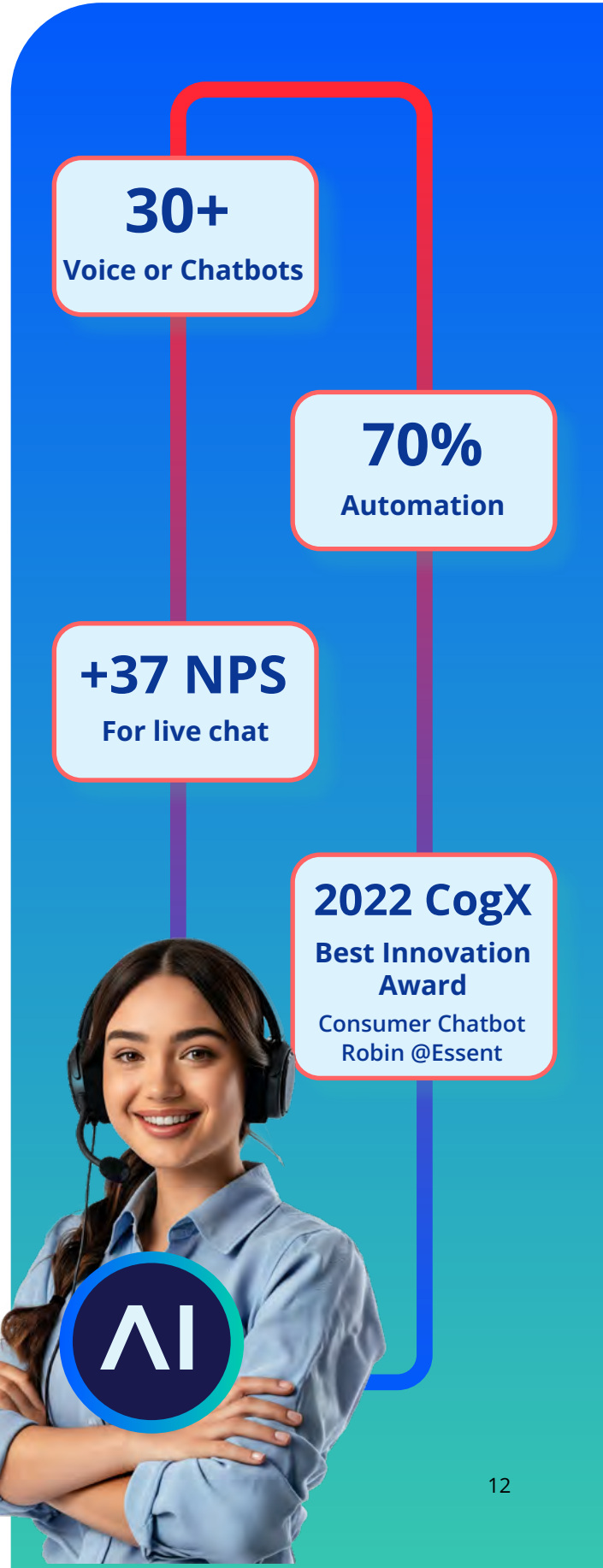
Customer service challenges are inevitable, and like the peak load of an entire continent turning on their air conditioners on the first hot day, E.ON must contend with peak loads in their contact centers too, not just in the grid.

E.ON Digital Technology (EDT) drives digital innovation. Its primary goal is to support E.ON's international business endeavors, focusing on pioneering customer solutions and products. EDT aims to bridge the gap between IT, business automation, and marketing by implementing forward-thinking digital channels and services (e.g., AI Agents for web, chat, and phone), followed by extensive scaling, including multinational rollouts. They have rolled out over 30 conversational AI solutions, achieving a 70% automation rate in serving both customers and employees.

Robin, an AI Agent in their Dutch subsidiary Essent, covers multiple use cases on phone and chat, including automated meter readings, self-service for billing, end-to-end contract changes, and updating payment details. With over 200,000 monthly conversations, the results have transformed the customer service landscape in the company:

Results

- ✓ Decreased workload for customer service representatives
- ✓ Increased customer satisfaction
- ✓ Massive reduction of operational costs



Overall Benefits of AI Agents in Numbers



Easy to scale

Can handle millions of calls per year



Assist Agents 24/7

Supports every agent on any channel 24/7



Multilingual

Able to understand and speak 100+ languages



Quickly deployed

Task-specific agents can be implemented and go live within weeks, not months



Personalized & Contextual

Can deliver contextual and personalized service using natural language



Reduce AHT

Agent assistance and even the partial automation of requests consistently reduces AHT at scale



Improve AX

AI Agents shoulder the burden of tier 1 requests which human agents hate, and assist agents in every interaction.



Deliver Knowledge

Use Generative AI and vector search to deliver instant, natural answers on any channel



+30%

CSAT improvement



15%

Shorter average handling time (AHT)



99.5%

faster response time

A recent 2023 report on the impact of Conversational AI in the contact center paints an even clearer picture:*

93% found that AI helps resolve customer issues

87% reported that AI reduces effort for agents

74% said that AI increases revenue

AI-Powered Customer Service Processes



* Source: 2023 "State of Conversational AI in the Contact Center Report" by 8x8

Case Studies



E.ON

One of the largest energy networks and infrastructure operators in Europe launched an IT-Service-Desk AI Agent

78K

Employees have access to the AI Agent

63%

Automation rate for IT tickets

97

saved working days p.a. in IT department



Utility company providing energy, telecommunications, and transport networks & infrastructure

Powered by **GenAI** & Knowledge AI

160k

Automated Chats a Year

89%

User Satisfaction Rate



SMARTCITY DUISBURG
INNOVATION CENTER

Develops and evaluates smart city prototypes with local research institutes, startups, companies, and citizens

6 Bots

Deployed in 1st Year

Voice UI

For power metering services

1000+

Subject areas covered

Conclusion

There's no shortage of amazing features or reasons to try AI, but the most important one is this: it's an indispensable part of your customer experience infrastructure, like your CRM, case management system, and CCaaS. Period. With increasing volume and complexity of inquiries and customer expectations matched with a labor shortage, AI is the only sustainable way to scale and meet these challenges long-term. If it still feels too new, ask yourself whether sticking with keeping customer data in Excel versus a CRM would still work. How much longer could you have managed before utter collapse, and how would you feel about having to justify that choice today?

It is imperative to treat AI as a pillar of your long-term customer service strategy, not a short-term tactic, band-aid, or technology-of-the-month. AI Agents are here to stay and will shortly move from the realm of competitive advantage to table stakes. Yet, you don't need to invest a fortune and tackle everything at once in one big bang of transformation.

AI Agents allow utility companies to skip complex projects in favor of ready-to-deploy solutions. They can quickly tackle narrowly scoped use cases, see ROI faster, and sustainably deliver better customer experiences across every channel. You could wait, but if that's the case, I have a black-and-white television with rabbit ears to sell you.

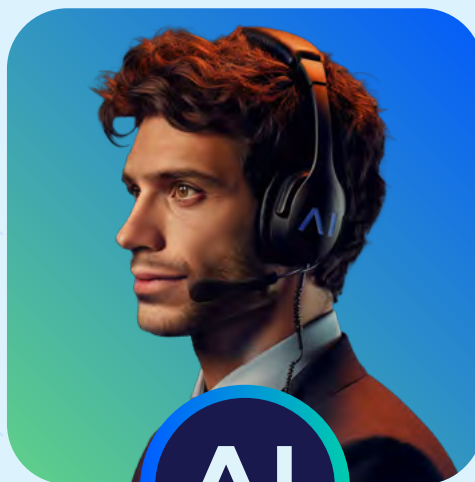
To learn more:

Visit cognigy.com and book a free demo today!

Attract
Customers



Faster ROI



Increase
Retention



Better CX



Redefine What's Possible with AI Agents

Your notes

Your notes



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