



**SUPPORTING THE FRONTLINE:
HOW AI HELPS UTILITIES TACKLE
TURNOVER AND DEMAND**

INTRODUCTION

Across the utility sector, a workforce storm is brewing. The “silver tsunami” - a term used to describe the mass retirement of Baby Boomers - is already reshaping operations. This demographic shift is more than a metaphor; it’s a measurable crisis. According to recent industry reports, nearly 50 percent of the utility workforce may retire within the next five to 10 years, taking with them decades of institutional knowledge and operational expertise (Fossil Consulting Services, Inc., 2024).



At the same time, entry-level customer service representatives (CSRs) - often the frontline of customer experience - face high turnover rates as demanding call volumes and outdated tools lead to burnout. Add in rising customer expectations and increasingly complex service issues, and utility teams find themselves caught between shrinking capacity and growing demand.

When Hansen asked dozens of municipal utility providers, “What’s the biggest misconception customers have about your organization?” at a recent Hansen Connect Live, the majority said that customers think their utility providers overcharge them or simply don’t care about them. In reality, nothing could be further from the truth. These teams care deeply about the communities they serve, but legacy systems and outdated technology often make it difficult to deliver the seamless, empathetic service their customers expect. For many municipalities, where recruiting and retention are constant challenges due to competition from private-sector salaries, those technology gaps compound the strain on already overextended CSRs, making every interaction harder than it should be.

The solution is not simply to add more headcount. Municipal utilities need smarter tools that empower existing staff to succeed, shorten onboarding for new hires, and reduce the burden of repetitive tasks. By adopting intuitive, modern systems, utilities can bridge the workforce gap - freeing up CSRs to focus on solving customer problems and allowing leaders to deliver a higher standard of service without overextending limited resources.



THE HIDDEN COSTS OF TURNOVER & BURNOUT

Turnover in utility contact centers isn't just a staffing headache, it's a costly, cascading problem. Every time a customer service representative (CSR) leaves, utilities face the immediate expense of recruiting, onboarding, and training a replacement. The CSRs remaining face lower quality of life as they take on void left by the former teammates.

A bigger loss often comes when seasoned CSRs leave from burnout. Seasoned CSRs carry years of experience handling complex billing adjustments, service orders, and high-stakes customer interactions. When they walk out the door, institutional knowledge is lost, service quality dips, and new hires require months if not years to reach the same level of proficiency.

Additionally, declining employee engagement and morale translate into longer call handling times, more escalations, and frustrated customers waiting in the queue. For utilities already under pressure to improve customer satisfaction (CSAT) scores, every delay and error has measurable consequences. What starts as a staffing issue quickly becomes a customer experience issue - one that regulators, city councils, and customers are all watching closely.

Municipal utilities face an even steeper hill to climb. Competing against private-sector contact centers that offer higher wages, richer perks, and more modern tools leaves many public utilities at a hiring disadvantage. This reality forces leaders to rethink their approach: throwing more headcount at the problem isn't sustainable. Instead, utilities need smarter, more intuitive tools that reduce burnout, help new hires ramp up faster, and allow existing staff to focus on delivering exceptional service.



AI AS A WORKFORCE ALLY, NOT A REPLACEMENT

When conversations about AI come up, one myth always seems to surface: “AI is here to take customer service and call center jobs”. It’s an understandable concern, but one that misses the bigger picture.

AI isn’t here to replace people, rather it’s here to reimagine their potential. When applied strategically, AI absorbs Tier 1, repetitive tasks like billing inquiries, password resets, and status updates, freeing employees to focus on the complex, high-value issues that require human judgment and empathy. This shift doesn’t diminish the employee’s role; it elevates it.

We polled dozens of municipal utility professionals across billing and customer service and asked them:

What’s the #1 thing you’d love to have Hansen AI do for your customers?

The top responses were clear:

- Handle repetitive Tier 1 tasks (for example, billing questions or payment requests)
- Reply to emails
- Reduce the number of calls

We followed up that question by asking:

When Hansen AI takes routine tasks off your plate, how will you use the extra time?

Again, there was a common theme among the responses:

- Allow staff to focus on complex cases (like proactive maintenance and a greater attention to analytics)
- Achieve a greater work/life balance
- Train and mentor other staff

This qualitative data underscores a growing consensus: the future of work in utilities isn’t AI versus humans, it’s AI plus humans. When the technology handles the high-volume, low-complexity work, employees can deliver higher-quality interactions, faster resolutions, and greater overall satisfaction for customers.

Think of AI as a co-pilot for customer service representatives. It can assist with routing calls, suggesting next-best actions, and surfacing relevant data in real time, all while the CSR remains in command of the customer relationship. The result is a workforce that’s not only more efficient but also more fulfilled, supported, and engaged.

Rather than threatening the human touch, AI has the potential to protect it. By removing friction, reducing burnout, and giving employees better tools, utilities can ensure their teams stay focused on what they do best: building trust and delivering reliable service to every customer, every time.

Introducing AI Agents into the call center frees up employees for training, real-time coaching and feedback after customer calls, and time to handle complex requests without feeling the stress of 12 competing, simultaneous priorities. That is the reality AI makes possible right now, and it’s transforming the culture within municipality call centers across the country.





BRIDGING THE GENERATIONAL SHIFT— CAPTURING KNOWLEDGE BEFORE IT WALKS OUT THE DOOR

As experienced representatives approach retirement, utilities can pair generative AI tools with outgoing employees' subject-matter expertise to operationalize the transfer of institutional knowledge.

Utilities can use the capacity gained from AI-assisted automation to formalize structured knowledge-sharing activities. As AI handles repetitive tasks such as form completion, data lookups, or standard correspondence, experienced employees gain time for intentional mentoring and one-on-one sessions with newer staff. Supervisors can schedule these sessions

during defined “knowledge transfer” blocks, with AI tools assisting in note-taking and summarization to ensure key insights are preserved.

This combination of digital capture and interpersonal mentoring creates a sustainable cycle of institutional continuity -one in which operational expertise is continuously updated, verified, and made available to future generations of utility CSRs. In this way, AI doesn't just alleviate the pressures of the silver tsunami, it helps utilities future-proof their workforce by ensuring decades of hard-earned experience are not lost but amplified through smarter systems.

MEETING THE NEXT GENERATION WHERE THEY ARE

Just as the silver tsunami reshapes one side of the workforce, another generational wave is transforming the other. Millennials and Gen Z communicate and engage in fundamentally different ways than their predecessors.

Utilities can no longer rely solely on traditional call-based communication models. AI will be essential in helping utilities meet their future customers where they are through channels they already use and trust rather than forcing them into outdated communication styles that lead to frustration and lower CSAT.

Here are some key insights into how younger generations prefer to communicate:



Digital-First Communication

Gen Z grew up with smartphones and social media, making instant messaging platforms their go-to for communication. Millennials still rely heavily on email but also embrace texting and chat for speed and convenience.



Preference for Brevity and Directness

Gen Z favors short, direct, and entertaining messages, while Millennials prefer concise but meaningful communication that avoids unnecessary meetings.



Value for Transparency and Inclusion

Both generations expect openness and authenticity from organizations. Gen Z, in particular, wants to feel heard and included in conversations.



Collaborative and Feedback-Oriented

Millennials and Gen Z thrive on feedback, preferring it to be constructive, timely, and often delivered through digital channels.



Visual and Multimedia Communication

Gen Z is highly visual -using emojis, GIFs, memes, and videos to express ideas quickly and emotionally.



AI-powered customer engagement tools, such as conversational chatbots, proactive notifications, and dynamic self-service portals, can help utilities adapt to these new expectations. Instead of requiring customers to call, AI can enable seamless, two-way communication through text, chat, or mobile notifications -channels that feel natural to younger users.

By aligning with these digital-first preferences, utilities not only improve customer satisfaction but also strengthen recruitment appeal to a new generation of tech-savvy employees who expect modern tools in their work environment. In short, the same technology that eases the retirement transition of one generation can help attract and retain the next.



REDUCING BURNOUT THROUGH SMARTER WORKFLOWS

For CSRs, burnout often stems from the relentless volume of routine inquiries. Questions about account balances, bill due dates, or outage status flood call centers every day, leaving little time for staff to focus on the complex cases that really require human judgment. AI-powered self-service tools can deflect these high-volume, low-value interactions, giving customers instant answers while freeing frontline teams to handle higher-priority issues. The result is shorter queues, fewer repetitive calls, and a noticeable reduction in daily stress.

But smarter workflows aren't just about automation. They're about making the system itself easy to use. With high turnover and constant onboarding challenges, utilities can't afford platforms that require weeks of training or 50 clicks to complete a simple task. Utility leaders are looking for intuitive, cloud-based solutions that new hires can pick up and use quickly, even without prior industry experience. A user interface that feels familiar, like navigating social media, reduces the learning curve and helps younger generations ramp up faster. Fewer clicks, clearer navigation, and straightforward workflows mean reps can find what they need instantly, not after minutes of digging.

When workflows are intuitive, the benefits extend beyond speed. Consistency in answers leads to fewer escalations and calmer calls. Mobile work orders and cloud-based accessibility make it easier for teams to stay connected and deliver accurate information from anywhere. And because the system is designed to be simple, utilities don't need a complex learning management system (LMS) just to get staff up to speed. Instead, CSRs can pick it up and go reducing daily stress, preventing after-hours backlogs, and ensuring customers get fast, reliable service. In short, smarter, easier workflows directly reduce burnout while building a stronger, more resilient utility workforce.

INDUSTRY STATS



Customer service leaders in utilities are under increasing pressure to deliver faster, more personalized support while managing costs and workforce challenges. AI is helping teams meet these demands head-on. By leveraging AI and automating Tier 1 interactions, utilities have seen 20 percent reductions in call volumes going to agents, freeing up agents to focus on more complex, high-value conversations (Blackader et al., 2025).



Agent efficiency is also on the rise, with Average Handle Time (AHT) reduced by 60 seconds (Blackader et al., 2025). More importantly, when AI is used to assist rather than replace agents, customer satisfaction (CSAT) increases by 15 to 25 percent, reinforcing the value of a hybrid human-AI model (IBM, 2025).



Beyond performance metrics, AI is reshaping the workforce. Utilities report fewer entry-level vacancies, better retention, and lower training costs, as AI takes on repetitive tasks and empowers agents with smarter tools.



For customer service leaders, the question becomes: Which outcome would most transform your operation - reduced call volumes, faster AHT, improved FCR, or higher CSAT? Hansen AI delivers across all fronts, offering a clear path to a more agile, efficient, and customer-centric service model.



PRACTICAL STEPS TO GET STARTED

Implementing AI in customer service doesn't require a massive overhaul. It starts with smart, strategic steps. Begin by identifying Tier 2 tasks that are ideal for AI deflection, such as billing inquiries, outage updates, and payment plan requests. These are high-volume, low-complexity interactions that can be automated without sacrificing quality.

Next, pilot AI in a single, high-traffic channel, like your web chat or IVR system. This focused approach allows your team to test, learn, and refine before scaling. Early wins can build momentum and demonstrate the value of AI to both leadership and frontline staff.

Equipping your team is just as critical. Train agents to see AI as a support tool, not a threat. When agents are

empowered to work alongside AI, they become more efficient and engaged, leading to better outcomes for customers and employees alike.

Track key metrics such as call deflection, CSAT, employee satisfaction, and retention to measure impact and guide future investments. Solutions like the Hansen Virtual AI Agent offer a utility-specific platform to accelerate deployment and deliver results quickly.

By taking these practical steps, customer service leaders can drive meaningful transformation - enhancing both operational performance and the customer experience.



CONCLUSION – BUILDING A SUSTAINABLE UTILITY WORKFORCE

The workforce challenges facing utilities today aren't temporary, they're transformational. Between widespread retirements, rising customer expectations, and ongoing staffing shortages, the path forward requires more than just filling open seats. It demands rethinking how work gets done.

AI offers that opportunity. When thoughtfully implemented, it allows utilities to scale productivity without scaling headcount, ensuring customers get the responsive, reliable service they expect—even as workforce dynamics shift. By absorbing repetitive Tier 1 tasks, AI frees your team to focus on high-value interactions that require empathy, expertise, and human judgment. The result isn't just faster service; it's better service.

More importantly, AI also improves employee experience. When systems are intuitive, workflows are streamlined, and AI handles the high-volume, low-lift inquiries, employees can do more of what energizes them and less of what exhausts them. Happier employees create happier customers, and that ripple effect strengthens both morale and loyalty across your organization.

The future of the utility workforce won't be defined by humans versus technology. Rather it will be defined by humans supported by technology. AI isn't replacing the human element that customers value most; it's reinforcing it. By partnering with solutions like Hansen AI, utilities can protect their people, preserve institutional knowledge, and power a new era of connected, customer-centric service.



INTERACTIVE TAKEAWAY/ CHECKLIST

As a final takeaway, we'd like to leave you with a practical list to think through before you get started on actionable change.

Use the questions below as a quick pulse check to gauge whether burnout may be quietly impacting your workforce and where AI-powered systems could make a measurable difference.

- What percentage of your team's capacity is dedicated to repetitive, manual tasks rather than high-impact customer interactions?
- How often do your frontline employees end their day feeling drained instead of accomplished?
- What percentage of your team regularly takes (and fully disconnects during) their daily breaks?
- How often do process inefficiencies lead to customer escalations or repeat calls?
- Are you factoring burnout-related turnover into your annual budget forecasts?

If you would like to discuss one or more of the above questions, reach out to us at www.hansencx.com/contact/.



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