



# The Ultimate Guide to AI for Complex Service



# A new approach to resolving service issues while capturing knowledge

Resolving customer issues in complex service environments is a struggle because knowledge is spread across vast data sources and in the minds of individuals.

To address this challenge, Neuron7 is leading a new category called Service Resolution Intelligence. Our customers get to 90%+ resolution accuracy faster with turn-by-turn guidance that learns from their data and their people.

Organizations with complex products, large product catalogs, or global teams may have tens of thousands of potential issues, with hundreds of thousands of resolution paths. The scale is beyond human capacity to manage.

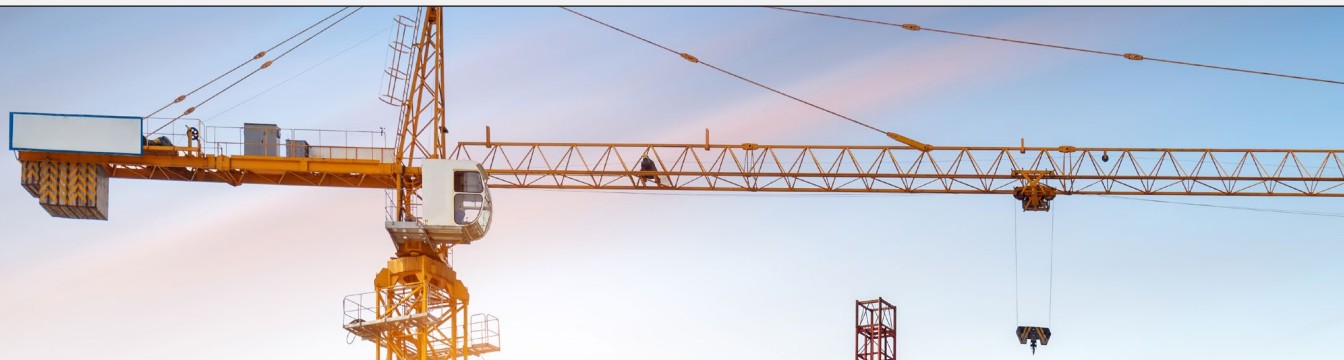
That's where Service Resolution Intelligence comes in. It's now possible to resolve issues faster, the first time, while capturing knowledge at scale.

To be effective at scale, Service Resolution Intelligence requires a combination of AI technologies, industry specific expertise, use cases purpose-built for complex service, and data governance.

## This guide will cover:

- ✓ Challenges of complex service environments
- ✓ Creating a single system of intelligence
- ✓ Learning from your data and people
- ✓ Neuron7's approach and case studies

# Common Challenges



## Products are increasingly complex

Complex products are all around us: networking devices, point-of-sale equipment, elevators, cranes, ultrasound machines, security screening equipment — the list goes on.

These products are comprised of hardware and software, may be connected IoT devices, and often include thousands of product models or versions.

Service teams struggle to keep up with all the products, versions, and configurations and their associated issues, errors, and bugs — with countless potential resolution paths.

The scale and complexity is overwhelming, making it difficult to find the best resolution.

## Resolution information is all over the place

Service teams try to find information to resolve issues in knowledge base articles (that may be outdated), documentation, technical manuals, and videos (that need to be searched through), past case notes (usually unstructured), IoT data, Jira notes, and more.

With countless sources of information that are hard to navigate, 81% of technicians “phone-a-friend” to tap into expertise in individual minds around the organization.\*

## Challenges in complex service environments



PRODUCT COMPLEXITY

# 1000s

of potential models, potential malfunctions and resolutions



VAST DATA

# 400

average # of data sources at enterprise organizations

# Common Challenges



## Continual knowledge loss

If increasing product complexity was not enough, organizations are losing expert knowledge as people leave the business.

Turnover in customer service is already high. Now, a wave of experienced workers are set to retire, and in some cases taking 30+ years of knowledge with them.

As people leave, new hires need training to get up to speed and become productive as quickly as possible.

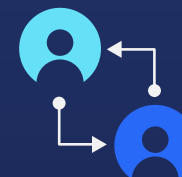
But with complex products and information all over the place, onboarding can take months. And with experts no longer available to train the new hires, the problems compound.

## Global service teams face complexity at scale

Many enterprise organizations operate across countries, with product information, knowledge, and customer inquiries in different languages.

Some teams also have pockets of expertise that are geographically dispersed. There may be an expert on a specific type of product in Japan, but how do you tap that knowledge to fix an issue in Canada?

## Challenges in complex service environments



KNOWLEDGE LOSS

**45%**

turnover in customer service,  
1.3x more than other teams

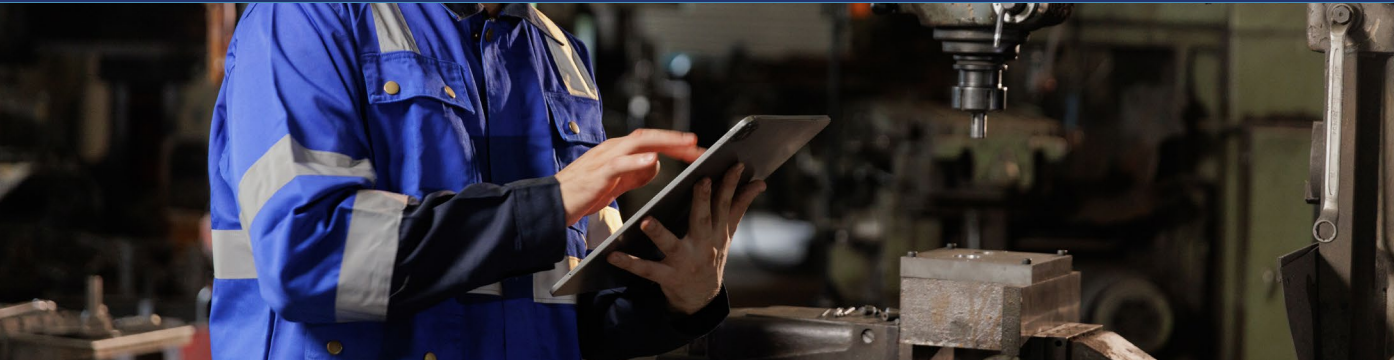


GLOBAL TEAMS

**80K**

companies operating across  
regions and languages

# Solutions



## Create a single system of intelligence with AI

Artificial intelligence (AI) cuts through complexity with its ability to analyze massive amounts of information across systems to identify patterns, predict answers, and continually learn.

Neuron7's AI analyzes vast data sources to identify issues and the best resolutions.

By bringing resolution knowledge together, service teams can tap into a single system of intelligence instead of searching through systems, documents, and videos for answers.

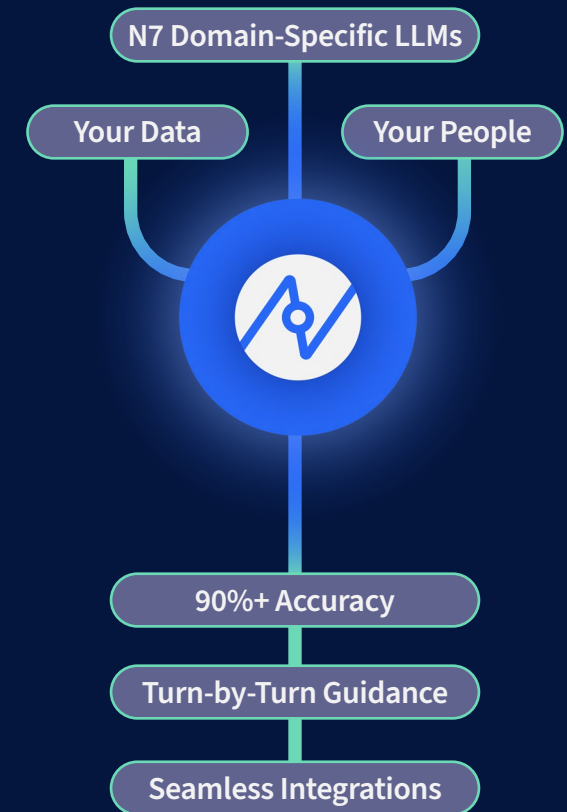
## Learn from data *and* people to achieve accuracy

Capturing resolution knowledge from data sources is only part of the picture. You also need to capture the expertise of individuals across service and engineering who have deep, hands-on expertise with products, issues, and resolutions.

To achieve the highest levels of accuracy, AI needs to learn from both data and people, in real time, and continually optimize resolution paths.

## Smart Resolution Hub

The Future of Service



# Faster Resolutions for Complex Service Environments



## Step 1

### Neuron7 learns from your data

Neuron7's AI analyzes structured or unstructured service data from any source including manuals, documents, cases, notes, technical bulletins, videos, and IoT data and distills into the best resolution paths for every issue, and every product.



## Step 2

### Neuron7 learns from your subject matter experts

Neuron7's large language models (LLMs) are pre-trained to understand service language and industry-specific terminology. Your experts validate the resolution paths to fine tune the model's AI predictions.



## Step 3

### Neuron7 learns from your people

Neuron7's AI guides technical support agents and field service technicians turn-by-turn through resolutions. You can add a new resolution directly into Neuron7 and the optimized resolution path is shared across the organization in real-time.



# What makes Neuron7 so accurate?

## Domain-Specific AI

Neuron7 uses domain-specific Large Language Models (LLMs) with deep training on service, industry, and customer-specific data to create a bespoke Smart Resolution Hub.

## Seamless Integrations

Neuron7 lives in the day in a life of your service team in your CRM, chat, portal, or other existing workflow to drive adoption, which in turn drives accuracy as AI learns from interactions.

## AI-as-a-Service

Neuron7 provides AI expertise at every step, from strategy, planning, and implementation, to ongoing accuracy tuning. Neuron7 provides a dedicated technical account manager that ensures accuracy throughout your engagement.

## Improve service and quality metrics

- ✓ **Resolution Time**  
Resolve issues faster with answers in seconds and turn-by-turn guidance (instead of endless searching).
- ✓ **First Call Resolution**  
With 90%+ accuracy, resolve issues the first time.
- ✓ **First Time Fix**  
Ensure you have the right skills, parts, and resolution steps to avoid multiple truck rolls.
- ✓ **Parts Wastage**  
Prioritize resolutions that don't require parts to cut costs.
- ✓ **Next Likely Error**  
Proactively address problems with predictive analytics.
- ✓ **CSAT**  
Measurably improve customer satisfaction and retention.

# AI Built for Complex Service

Neuron7 helps enterprise service organizations with complex products, vast product catalogs, and global teams resolve issues faster. Key industries with complex service environments include:



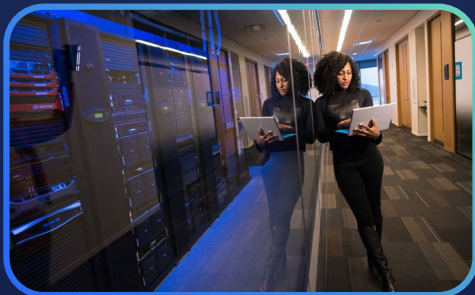
## Medical Devices

Uptime for complex (often lifesaving) medical devices is critical.



## Industrial Equipment

Parts wastage, long-fix times, and repeat visits negatively impact CSAT and the bottom line.



## High-Tech Devices

All devices are becoming more technical, with potential hardware, software, firmware, and IoT issues.



## Telecom Equipment

Telecom equipment keep the world connected and customers expect issues to be resolved quickly.



## Utility Equipment

Aging infrastructure, unexpected outages, and complex issues challenge service teams to ensure reliability and efficiency.

*Read on for case studies...*



# Case Study

## How NCR Atleos Streamlined Field Service and Reduced Revisits by 25%

NCR Atleos, a \$4.1B enterprise that delivers ATM solutions, wanted to make it easier for field service engineers to do their best work. With articles, manuals, and parts data spread across systems, engineers were spending too much time finding information and answering repetitive inquiries.

### Search That Points to the Exact Answer

NCR Atleos partnered with Neuron7 to empower field service engineers with AI-generated resolution intelligence. N7 Intelligent Search finds “one right answer” from NCR’s knowledge base articles, engineering documentation, call notes, training videos, and complex parts information, reducing dependency on multiple knowledge platforms and enabling faster, more accurate resolutions.



**NCR  
ATLEOS**

*Neuron7 really gets to exactly what we needed. A product that levels the playing field for newly onboarded technicians to be just as successful as a 10-year.*



**Bill Girzone**  
SVP Global Field Services

**2.5 mos**

Time until N7  
paid for itself

**90%**

Accuracy

**5**

Minutes saved per  
90 minute call

**400,000**

Minutes saved to date

## Case Study

### How Ciena Enabled Self-Service and Improved CSAT by 14%

Despite robust knowledge base articles and search engines, Ciena, a \$3.6B networking and telecom equipment provider, logged 7,000+ support cases each year for issues that should have been easily resolved.

#### Give Call Center Agents “One Right Answer”

Ciena partnered with Neuron7 to create a Smart Resolution Hub.

This single system of service intelligence allows them to identify and deliver only the most relevant resolution information to call center agents (instead of multiple, confusing options).



*The team at Neuron7 said, ‘let’s work with you to make this happen’ and that continues to this day. This is not just off-the-shelf products or static algorithms. It is truly a collaborative effort.*



**Chandan Banerjee**  
Director Global Services Digital Innovation

**50%**

Increase in call deflection

**46%**

Faster resolutions

**48,000**

Searches with “one right answer”

**14%**

Increase in CSAT

## Case Study

### Translogic Empowers Field Service While Reducing Wait Time by 45%

TransLogic's healthcare transport systems play an integral role in patient care. Uptime is critical and service delays have a direct impact on CSAT and customer retention.

With retirements on the horizon, they needed to find a better way to level the playing field for their newer service team members.

#### Capture & Share Knowledge

TransLogic partnered with Neuron7 to identify the best resolution for every issue, and every product.

Neuron7 learns and shares optimized resolution paths in real time so Translogic's field service teams – from junior to expert – receive fast, accurate turn-by-turn guidance.



*The beautiful thing about Neuron7 is that you can take resolutions from case history and instead of 3 hours of troubleshooting, the technician has the answer in 3 seconds.*



**Dave Hartley**  
VP Customer Care

**18%**

Faster response  
time

**96%**

Accuracy

**960**

Warranty hours  
saved

**45%**

Reduction in  
wait time

## Neuron7 Partners with Leading Service Platforms

Neuron7 seamlessly integrates into existing service workflows, providing fast, accurate resolutions where your teams work.



**John Page**

President of Global Services

*The reaction has been wonderful. They love it. We literally have it interfaced directly in the consoles they use on a daily basis. So we get better customer service, we get more efficiency, and we get happier employees as we're doing this.*





# Thank You.

## AI Strategy Session

Sign up for a complimentary consultation to gain insight into your burning questions about AI, with strategic guidance and best practices.

[Get Started](#)