CASE STUDY

TM Forum | October 2025

AIS Thailand embraces AI in intelligent customer support

Sponsored by:

HUAWEI

Author:
Teresa Cottam,
Contributing Analyst

Overview

In 2017, AIS Thailand embarked on a customer-focused, multi-stage digital transformation with the aim of evolving into what it terms a 'Cognitive Tech-Co' capable of high levels of innovation, agility and flexibility, as well as world-class, proactive customer care. In 2023 we looked at its progress towards these goals as it began delivering intelligent operations and experience. In this case study we discover more about its latest innovations in customer support and fault management. Not only is AIS continuing to systematically focus on its customers' needs and experiences, but in the last two years has also successfully identified key areas that it can automate and apply intelligence to in order to boost customer satisfaction, reduce the load on its customer service representatives (CSRs), minimize costs and optimize the time of its engineers.

AIS Thailand at a glance:

Customers

- **45.8 million** mobile subscribers, of which 12 million are 5G
- **5.07 million** broadband subscribers

Service offerings

- Fixed / broadband / fiber
- Postpaid and prepaid mobile
- Entertainment
- Finance and insurance
- Enterprise services – such as cloud services, data networks and data centers

Products and assets used

Huawei:

- SmartCare
- Smart DataCube
- Autin + iStudio for intelligent fault management
- NAIE (Network AI Engine)

TM Forum:

- Automation frameworks
- Open Digital Framework (ODF)
- Open APIs

Business challenge

AIS wanted to reduce the burden on its CSRs by automating customer support as much as possible and making it easy for its customers to use digital channels. It has also sought to find more efficient ways of maintaining network availability and quality of service to boost customer satisfaction.

Solution

AIS's super app – MyAIS – provides efficient and automated digital support, empowered by new integrations and AI / machine learning models. LLMs and digital twins have been applied to fault management and customer support – enabling AIS to predict, prevent and resolve problems faster and provide efficient digital care. An intelligent copilot has also been deployed to boost the performance of its field maintenance engineers.

Key benefits

- 57% of customer enquiries are now handled through MyAIS.
- 72% of these can be fully resolved automatically.
- 20% less service downtime has led to a 10% boost in customer experience.

Cognitive techco evolution

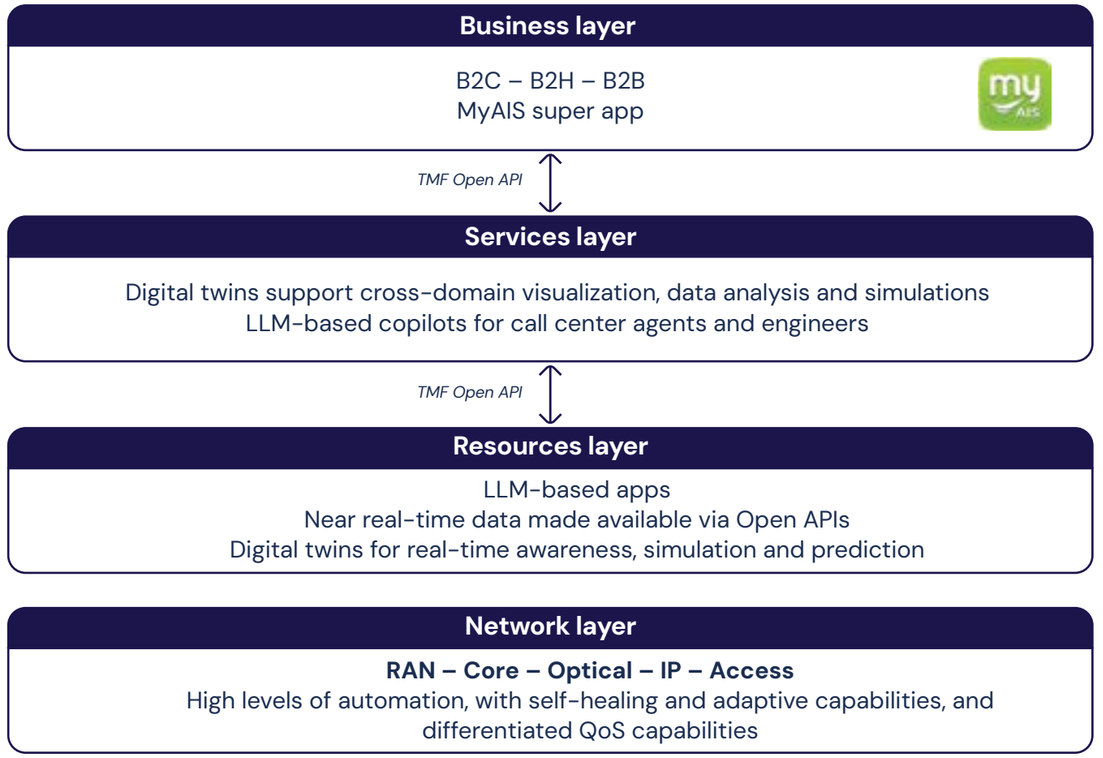
In the next stage of its evolution towards becoming an AI-empowered cognitive techco, AIS focused on common and acute fault management and complaint management scenarios – rolling out new processes and technologies to address them – building on its precise control of network performance and high levels of network automation.

In November 2024, AIS achieved a rating of 3.2 for RAN fault management under TM Forum's Autonomous Network Levels Evaluation Methodology. The methodology includes a six-level taxonomy for CSPs to measure their progress in implementing autonomous networks, with most CSPs that have taken the assessment currently at Levels 2 or 3. AIS plans to leverage large language model (LLM) and digital twin technologies as it moves toward Level 4 – representing a major shift from traditional human-defined automation processes to true autonomous decision-making – in fault management and complaint management. And it will work towards automating more scenarios in network optimization, network configuration and network planning processes.

The level of control it now has over its network means that by December 2023 it was able to launch a new service – 5G Mode – which allows it to match the network experience to service and user needs. Tailored add-ons are available via its super app – myAIS – such as Boost Mode which provides users with faster speeds, Game Mode which provides low latency and fast network responsiveness, and Live Mode which ensures creators can upload and stream content wherever they are situated. Within three months, the service had attracted more than 180,000 users, with each purchase boosting customer ARPU by more than 22%.

In the following sections we look at some of the innovations AIS has delivered since 2023.

AIS innovations across its four-layer architecture



TM Forum, 2025 (source: AIS)

AI-powered digital customer service

AIS launched its customer app – MyAIS – in 2011 to enable its customers to check and pay their phone bills, find out information about their packages and promotions, and discover privilege vouchers related to their loyalty and spending. It subsequently evolved MyAIS into a super app that supports an extended range of services – entertainment, finance (insurance and loans), health, lifestyle, food and beverages – some of which are self-developed and others being offered via an ecosystem of partners.

Although AIS had implemented chatbots for digital customer support, take-up was not as high as anticipated. It found that customers were not using them, because getting help required a lot of manual typing. The company realized it had to simplify the interface and make it quicker and easier for customers to get the support they needed, resulting in three-tap digital support via the MyAIS super app (see graphic).

The MyAIS support interface was specifically designed to require only three taps to get help, with data retrieved automatically to speed resolution. By concentrating on the most common support problems, AIS ensured that most of its customers get an instant solution to their problem. If the problem is more complex or can't be automatically fixed, a trouble ticket is opened and they are informed that an engineer has been assigned, along with an estimate of how long the fix will take. Upsell and cross-sell capabilities are also integrated, meaning that customers can be advised where a bolt-on (such as Game Mode for gamers) would enhance their experience. Finally, if the customer is not fully satisfied with the interaction, they have the option to report the issue by verbally describing it – with the system converting speech to text to facilitate further analysis.

In the first four months since three-tap customer support was launched in November 2024, AIS found that 57% of customer enquiries shifted to the channel, and of these 72% could be automatically resolved without human intervention.

Three-tap support via MyAIS

Open app

1. **Tap for support**
2. **Tap whether your problem is with mobile, broadband or AIS Play**
   The system will automatically populate the inquiry with basic data such as time, telephone number etc.
3. **Tap the type of problem you're experiencing**
   Auto-diagnosis is performed, based on your current context. The system provides the customer with an answer to their inquiry or creates a trouble ticket.

TM Forum, 2025 (source: AIS)

Customer complaint prevention

A key component of MyAIS's success in providing automated resolutions to common customer inquiries is its customer complaint prevention (CCP) model, also launched in 2024. This uses a digital twin of the network to correlate relevant data (such as xDRs, network performance, signal strength, fault management data and so on) with the customer's identity and location to provide insight on common problems that can disrupt network experience (such as slow internet, slow throughput, weak coverage, congestion, dropped calls and sites that are down).

This diagnosis engine enables AIS to gain a more precise picture of real experience for individual customers, with this insight converted into a digital record. AIS also measures the completeness of the event (is it still ongoing?), as well as the confidence level that the algorithm's diagnosis is correct.

> AIS uses a digital twin of the network to correlate relevant data with the customer's identity and location to improve network experience.

Examples of problem diagnosis using AIS's 4W method

When?	Who?	Where?	What happened?
8.35	Office worker	On the way to work	Poor signal while watching short videos
9.08	Sports enthusiast	In the middle of hiking	Disconnected during a video call
10.16	Customer	Coffee shop	Payment interface lagged while scanning QR code
12.13	Food delivery driver	In the middle of a delivery	Navigation interface lagged

TM Forum, 2025 (source: AIS)

If the customer subsequently requests help through myAIS, their identity (via the phone number), time, location and rough description of the problem can be correlated with the correct event in the diagnosis engine, speeding up the triaging process. The customer can then be provided with a simple explanation of what has happened, what they can do to fix the problem (such as restart a router or download a firmware fix) or what AIS intends to do next (such as send an engineer to fix the problem).

Optimized network experience, zero outages

With temperatures reaching 38°C/100°F in summer and a tropical climate that frequently results in floods during the rainy season, Thailand also faces risks from cyclones, landslides and earthquakes. If there is a natural disaster, it is vital that customers can call for help or use their phones to find information.

To ensure continuous network availability, AIS wanted to use an AI model to diagnose problems and then take action to minimize their impact or solve them, working towards what it terms 'zero outage' operation. Minimizing network disruption is not only vital to meet customer needs in emergency situations, but also serves to deflect large numbers of inquiries from AIS's call centers.

AI-enhanced outage support process

Awareness	Analysis	Decision	Execution
• High temperature prediction • Back-up battery lifetime prediction • Fiber error prediction	• Alarm correlation and root cause analysis • Auto job and auto tickets • Cell outage detection • Traffic burst detection • Intelligent root cause diagnosis		• Guidance through field maintenance engineer copilot • Auto compensation for cell outages • Auto compensation for high traffic bursts and load balancing

TM Forum, 2025 (source: AIS)

AIS's AI-empowered 'zero outage' strategy and support processes initially focus on addressing the most common disruptive events:

- **mains power failures** – if a power failure occurs, back-up batteries kick in to keep the network running. Previously, it was hard for AIS to know how long batteries would last, because this is dependent on the battery's age and usage. By implementing proactive battery monitoring and lifetime prediction, AIS is now able to take smart power-saving decisions to help batteries last longer. These measures could involve shutting down part of the spectrum or support for certain services.
- **high temperatures** – by monitoring, predicting and alarming high temperature events, AIS can now take smart preventative action to minimize disruption to its network (such as increasing cooling or switching off features).
- **hardware faults** – to minimize customer impact, AIS uses neighboring cell information and MR changes to automatically detect and take action if there are sudden hardware faults that are not alarmed.
- **fiber cuts or errors** – fiber cuts cannot be predicted as typically these are one-off, unexpected events. Here the priority is to detect the problem, create a trouble ticket and schedule engineers to attend and fix the problem as quickly as possible. However, errors can be predicted by monitoring degradation in optical fiber and planning scheduled maintenance to replace the fiber before it fails.

Wherever possible, AIS will try to automatically or remotely fix problems, acting on the insight generated by the model. It can also combine auto cell outage detection and compensation with the predictive models shown above. Rolled out in 2024, this capability means that, for example, when there is a power outage the predictive model can maximize battery life. But if the outage continues for several hours and the back-up battery runs out of power, neighboring cells can be automatically reconfigured to compensate by extending or adjusting their coverage. When power is restored and the cell is running again, the neighboring cells are automatically returned to their original configuration.

If the problem is due to a sudden local increase in traffic causing congestion in the network, AIS uses intelligent traffic burst control (ITBC) to maintain quality of service. For example, if there's a sudden flood and a road is blocked, customers might find themselves in a traffic jam on the way home from work. Naturally, they will consult their phones to find out what's happening, call their families to tell them they are delayed, and perhaps even watch a film to pass away the time. If hundreds of passengers are stuck on the same road, suddenly the demand for capacity will increase exponentially in a small geographic area. Using the ITBC capability, adjacent cells can be automatically reconfigured so that traffic is offloaded to them – maintaining quality of service and customer satisfaction.

However, where it isn't possible to address a problem automatically, field maintenance engineers will need to be dispatched. AIS wants to optimize work orders by ensuring they are fixing the most pressing and highest impact problems first and helping them address them as quickly as possible.

To assist with the latter issue, it has developed a copilot which ensures even inexperienced engineers can benefit from the knowledge and insight of AIS's most senior and experienced staff. The engineer can take a picture of a problem (such as a port or fiber) with the copilot intelligently matching the issue to next-best-action advice and guiding them through the fix.

Combatting fraud

Another major driver of traffic to AIS's call centers is from customers asking for help after they experience fraudulent calls, resulting in 1.17 million support calls since 2023. Online fraud is a major issue in Thailand, with Thai citizens losing 60 billion Thai baht (about $1.8 billion) in 2024 due to sophisticated telephone and SMS scams. This problem is also systematically undermining confidence in the Thai digital economy – ultimately affecting its growth and AIS's future business.

To combat this threat, AIS has taken a range of measures. Its free Secure Net service has blocked more than 500 million dangerous websites since June 2019 – detecting and combatting an average of 240,000 malware, phishing and virus threats a day – while it has also re-emphasized its commitment to customer safety through its participation in the Secure Network Alliance, a collaboration between 100+ organizations that are working together to disrupt cyber threats and safeguard both citizens and the national economy.

In 2024, it launched a 1185 service in collaboration with The Central Investigation Bureau (CIB) of Thailand. This is a crowdsourcing initiative that allows customers to immediately report and block scam phone numbers as soon as the call ends by simply dialling *1185#. Powered by the AIS USSD Anti-Fraud System, the service fields 7,000-8,000 reports per day, which not only keeps customers safer but also deflects a similar number of calls from the call center, reducing the burden on AIS's CSRs.

> AIS has developed a copilot which ensures even inexperienced engineers can benefit from the knowledge and insight of its most senior staff.

What's next?

AIS will continue to develop digital twins with advanced collaboration between the resource and service layers, and identify high-value scenarios it can address while working towards Level 4 of TM Forum's AN taxonomy.

It intends to develop its field maintenance engineer copilot further – enabling closer co-operation between field engineers and network operation center (NOC) personnel. For example, for some fixes engineers need to check with the NOC team whether the alarm has been resolved and normal service resumed. This involves ringing or messaging the NOC engineer who may be working with upwards of 50 field engineers. Inevitably, field maintenance engineers end up queuing for time with the NOC engineer. Later in 2025, AIS plans to add functionality to the copilot to streamline this part of the process to minimize the need to wait and to optimize engineers' time. It will also provide scheduling priorities and plan more efficient site visit routes based on the service impact of faults.

Energy saving in the radio access network (RAN) is another area where AIS is planning to apply AI to make its solution smarter. Currently, it uses an AI model to optimize energy consumption to support normal traffic patterns, but intends to develop this further. By taking more scenarios into account and using real-time data, LLMs and digital twins, it aims to gain a much deeper understanding of RAN energy usage and identify new ways to minimize it.

Key learning points

Listen, analyze and act. It's a given that you can't always get things right straight away. AIS shows that by analyzing customer feedback and uptake, and acting upon the insights gained, you can refine and improve your approach. A good example of this is how AIS took on board the need for lower customer effort to boost uptake of digital customer care. Its three-tap approach, available via its super app, makes it easier, more convenient and faster for customers to get help, resulting in lower customer effort scores, greater uptake of their AI-empowered self-care application and a decrease in call center traffic.

Understand the real cause as well as the total impact. Sometimes to solve one problem you need to address another. The huge level of digital fraud in Thailand wasn't just a problem for customers – it was undermining their confidence in the digital economy which had the potential to adversely affect AIS's business plans while driving substantial traffic to the call center. Keeping customers safe from online harm is a responsible business practice, but it's also highly strategic and pragmatic. By understanding the negative impact it had on customers, the economy and AIS, the operator was able to solve more than one problem at once.

Identify correlations and the potential for cross-departmental co-operation. AIS understands that it must take a holistic view of its operations to create a fully integrated business organization. This has seen it identify where helping teams work together more effectively will deliver even more value to both the organization and customers. AI is an invaluable tool when it comes to sharing insights and bringing processes and teams together. An example of this is how, by helping NOC teams and field maintenance engineers co-operate more effectively, AIS can save thousands of engineer hours (which has significant operational and cost implications) as well as speed resolution of problems (which has customer satisfaction implications).

tm forum

Sponsored by:

HUAWEI