

CASE STUDY

Baxi

UK boiler manufacturer Baxi has 240 field based engineers, who service and repair domestic boilers and heating systems.



Background

UK boiler manufacturer Baxi has 240 field based engineers, who service and repair domestic boilers

and heating systems. Baxi's primary focus is on customer experience, as consumers today have high expectations; they want to know exactly when the engineer will arrive, to get a fast, first-time fix, and to be kept informed at every step of the way.

The customer service and support operation is based at Baxi's headquarters in Warwick, with customer service operatives working in the Warwick call centre and a nationwide network of field based service engineers, each completing around six or seven visits per day. Over the course of a year, Baxi will repair or service approximately 270,000 boilers, keeping the heating on and the water hot in homes all over the UK.



Baxi's field service operations team was tasked with improving customer experience, in order to increase satisfaction and, ultimately, contract sales. This was a challenging objective, as Baxi's customer experience was already highly rated; it is easy to improve where there are many obvious flaws, but finding the small 'marginal gains' that add up to noticeable improvement is much more difficult.

The aim of the project with Cognito iQ (acquired by Totalmobile in March 2021) was to be data led rather than, relying on gut feel to make decisions about which areas to work on to improve. The final measure of success for the project was that customer experience would improve, with a knock on effect on sales and/or retention, and that the project would be sustainable, delivering a data model that would support an ongoing programme of continuous improvement.

The Solution

The solution, Cognito iQ implemented enables organisations with large mobile workforces, to visualise and control performance across key dimensions including cost, quality, efficiency, customer satisfaction and profitability. The solution has evolved over many years to include over 300 metrics, specific to the field service industry, which can be configured for each customer's individual business processes, usually down to 50 to 80 KPIs.

By systematically capturing and measuring performance throughout the operation, the solution enables organisations to:

- 1. align individual decision making with organisational objective's by,
- determining data-driven strategic objectives, and
- identifying execution strategies to realise these objectives, whilst
- 4. creating a feedback loop that continuously improves performance across the operation

Part of the solution that Baxi implemented uses machine learning to analyse the complex flows of activity within the operation, to establish the patterns of performance, and to highlight opportunities for improvement, along with detailed recommendations for implementation. Once the improvement plans (objectives, policies and schedules) were defined, the Baxi operation could access them using a unique feature of the solution - the real time dashboard.

For Baxi, the real time dashboard acted as a 'single pane of glass' through which to view and manage the day-to-day performance of the operation, using dimensions such as utilisation, efficiency, quality and effectiveness. As the data is presented in real time, managers can correct issues before they arise, preventing problems in areas such as customer satisfaction or engineer safety.

Additionally, the solution enables Baxi's managers to review past performance by 'replaying' the operational flow, and the events of the last shift, day, week or other time period, to analyse when, why and how exceptions occur. This enables them to study their response, and the outcome, in order to make the changes that will prevent similar exceptions in the future.



Project methodology

The project had two stages. Firstly, using the Net Promotor Score (NPS) as the key measure of customer experience, Baxi and Cognito iQ identified which areas were most likely to have an impact. The team analysed key drivers of NPS, looking for factors that correlated with particularly high or low scores, and also brought in data from sources such as customer complaints logs and surveys to give a broader picture.

The analysis identified four factors - moments of truth - the areas that, if you get them right, will guarantee a high NPS:

- 1. Visit response: how soon Baxi dispatches an engineer after a customer call
- 2. First-time fix (FTF) rate: whether the problem is fixed on the first engineer visit
- 3. Further visit: if not fixed first time, how quickly a second visit can be arranged
- 4. Call response: how quickly the call centre answers a customer call

The next stage was to analyse the KPI data using additional functionality to confirm these moments of truth. The results highlighted the metrics with the greatest potential for improvement.

The Outcome

- ✓ Contract sales grew by 5,000 sales per month
- Customer experience metric, NPS, improved from 68 to 72
- ✓ Visit response saw 25% improvement
- Improved FTF rate revisits down from 19.2% to 17.8%
- Average times for engineer revisit fell from 6 days to 3.5 days
- Call centre response time improved from 81% to 90% answered within SLA

"It's a much better way of working. We are the face of Baxi and it is uncomfortable to have to explain why you are late, or to have to call the customer and say you won't make it that day. The new procedures mean that doesn't happen anymore. It also feels less rushed during the day as I know that my colleagues will support me if I'm struggling. This supports our total commitment to working safely" John Bryant, Baxi Engineer

Visit response

The data highlighted an issue with the Engineer Compliance KPI: engineers were not always starting or finishing shifts at the right time, attending visits in the right order or taking the planned amount of time to complete tasks. The team used the solution to analyse the root causes and define improvements. They addressed the issue partly through training, and partly by altering the mobile app to provide alerts to assist the engineers throughout their shifts – this also improved engineer safety.

Improved compliance led to improved productivity and efficiency - there were more engineers available, without having to increase headcount. The visit response metric improved from 3.3 days to 2.5 days, a 25% productivity improvement, during the project.

First-time fix

The team analysed the FTF rate KPI to see if there were any patterns, resulting in insights around the type of jobs that were causing second visits. For example, a particular type of boiler had a component that wasn't typically carried on the vehicle and, if this failed, the repair was complex and would take around two hours, rather than the typical 45 minutes allocated to a visit. The team put together a decision-tree script for the call centre to identify these repairs before the visit, so they could ensure the part was on the vehicle and that the correct amount of time had been allocated for the job. In the year, around 500 of these repairs were identified and fixed first time. With this and other insights, the revisit rate improved by 8% during this first year and there were knock-on positive effects on compliance too.

Further visit

Sometimes a FTF isn't possible and a further visit has to be made. Analysis of satisfaction data showed that customers prefer the engineer to arrange the follow-up at the premises, before leaving the job. The Baxi team worked with Cognito iQ to configure the engineers' mobile application to give them realtime access to the information they needed to make the appointment on the doorstep. Average further visit times fell from 6 days to 3.5 days over the course of the year.

Call response

With improved compliance and productivity, improved first-time fixes, and more engineers available, the call centre found that the type and volume of calls it was receiving from customers changed as a natural consequence. Call response time improved from 81% answered within SLA to 90% answered within SLA over the period.

"The project has exceeded all our expectations. We knew it would be tough to find the marginal gains that would add up to big changes for our customers, our engineers and our bottom line, but working with Cognito iQ has yielded significant results." **Steve Randall, Head of Business Change, Baxi**

The Impact

The key metric for customer experience, the NPS, improved from 68 to 72 - a 6% improvement over the period - and contract sales grew by an additional 5,000 sales per month over the course of the project. The team at Baxi continues to use the solution to ensure that the gains they have made are perpetuated and, as these have freed up resource while improving core metrics, there is the capability for further analysis and development. A continuous improvement culture is important to Baxi; they are already beginning to identify the KPIs to target for the next improvement cycle, in order to keep their workers engaged, happy and delight their customers even more. They are also looking to deploy the solution to other territories.

NPS improved by 6%

Contact sales grew by an additional **5,000** sales per month

"I was frustrated when the engineer couldn't repair my boiler on the day, as it had been challenging for me to align my tenant's availability to this appointment. However, after hearing that the engineer made the follow up appointment directly with my tenant on site, I was really impressed to know that she had heating and hot water again the very next day. This was particularly pleasing to hear, as no further intervention was required by me and I had a happy tenant once again. Thank you Baxi." *Mrs Dams, Baxi* customer



What's Next?

To learn more about our products & solutions, visit https://www.totalmobile.co.uk

or contact us via the details on the back of this document.



Totalmobile is market leader in field service and mobile workforce management technology, helping organisations deliver more service, of the highest quality and at reduced cost.

Our SaaS based software provides a range of innovative products that deliver a step change in field service performance, mobile worker empowerment and management control.

This unlocks transformative cost savings, capacity gains, productivity improvements and empowers allows mobile workers to focus on consistently delivering the best service.

Belfast HQ

Pilot Point
21 Clarendon Road
Belfast
BT1 3BG
+44 28 9033 0111