Arm Treasure Data
CDP at Subaru

Helping Shoppers Love the Ride, from First Look to Loyal Enthusiast
Today we place particular emphasis on capturing post-purchase driver data and feedback for use in the development of new products and services. Connected cars and data also facilitate collaborative creation with external companies. The volume and variety of data we collect help Subaru build customer loyalty and distinguish our brand for success in a highly competitive transportation market.

Saito Kazutaka, general manager of Digital Innovation

Subaru’s CEO says such affinity comes from trust based on drivability, safety, and high quality that includes vehicle durability. An astonishing 97% of Subaru vehicles sold in the last 10 years are still on the road today.³ But there’s a lot more to the story. Subaru wants you to love owning and driving your car, from your first interaction with Subaru through a years- or even decades-long relationship.

Saito Kazutaka, general manager of Digital Innovation at Subaru, says that data management is key to delivering that experience. "We first implemented the Arm Treasure Data enterprise Customer Data Platform (CDP) to unify customer data for operational improvement and web optimization. Since we began using Arm Treasure Data in 2016, we’ve unified more than about 200 data points and 80 billion data records. We currently collect more than 8 million new transactions daily, across the entire customer journey."

It’s easy for buyers to love a new car—there’s that smell, the shine, the sounds, the power and perfection. But further down the road, when the newness wears off and the payments kick in, will they still love the ride? A whole lot of Subaru owners would say yes. Just ask drivers in New England, for example, where the brand enjoys an almost cult-like following and an abundance of multigenerational family owners.¹ And the enthusiasm extends well beyond the Northeast. Industry studies consistently place Subaru among the leaders in customer loyalty. A recent J.D. Powers brand-loyalty study ranks Subaru the highest among mainstream auto brands.²

¹ https://www.torquenews.com/1084/how-subaru-scores-2-automaker-customer-loyalty-see-who-s-1
² https://downeast.com/arts-culture/subaru-maine-love-story/
² Based on IHS Markit U.S. vehicles in operation vs. total new registrations for MY2009-2018 ending in December 2018.
While Subaru continues to grow—annual revenues now exceed $29 billion (US$)—market pressures and automotive-development costs associated with CASE technologies continually squeeze the company’s profit margins. Recognizing a prime opportunity to improve efficiencies, Subaru first evaluated CDP solutions to help reduce customer-acquisition costs and improve marketing return on investment (ROI). The goal was to make better use of existing first- and third-party data to simultaneously enhance the customer web experience and to improve web advertising.

Ogawa Hideki, chief engineer of Digital innovation at Subaru says, “Unfortunately, the data we needed was scattered across more than a dozen sources—advertising logs owned by agencies, web data stored in Google Analytics and other tools, campaign data captured by different in-house departments, and basic customer information contained in a variety of dealer management systems (DMSs). To give you an idea of the complexity, our marketing department managed website logs, the sales organization stored purchase history, and customer support maintained service data.

Our third-party data was equally scattered—separate agencies, for example, managed the unique advertising data associated with each of our eight car models. So the challenge was to consolidate all of our existing data onto a single platform that could also scale to accommodate what we expected to be exponential data growth.”
Use Arm Treasure Data CDP for pre-built connectors, scale, and robust analytics

Ogawa explains the selection of Arm Treasure Data. “The Subaru team initially conducted a trial of an on-premises Hadoop environment. But the solution was expensive and did not scale well. In contrast, Arm Treasure Data gives us the required scalability, pre-built connectors to easily consolidate data from all of our offline and online sources, and an array of tools for analytics and machine learning.

“As a software-as-a-service (SaaS) solution, the Arm Treasure Data CDP also allowed us to get started faster and at a lower cost than implementing on-premises infrastructure. Another benefit of the SaaS solution is that we can keep pace with rapidly changing technology without maintaining our own deep bench of big-data talent. Our expertise is automotive engineering, not IT.”

The Subaru Digital Marketing team estimates that a homegrown solution would have taken just shy of one year to develop. In comparison, the Arm Treasure Data CDP delivered an 80 percent faster time to value, with first services up and running in weeks and the solution fully deployed into production within three months. Atsushi Yasumuro, senior manager of Digital Marketing at Subaru, says, “We could hardly believe the onboarding process with Arm Treasure Data was completed in such a short time. We encountered no technical problems in the process.”
Achieve enterprise-grade scale on the way to 5G

Within six months of the Arm Treasure Data CDP implementation, Subaru had consolidated one billion data records, including:

- Dealership WiFi logs
- Customer loyalty information from the MySubaru app
- Questionnaires
- Social channel and customer relationship management (CRM) data
- First-party proprietary data
- Second-party media data and third-party anonymous data

“The segment data prepared by the media is data that can be accessed by all competitors of the car, and ultimately becomes a game of volume (amount),” continues Ogawa, “but Subaru’s ability to do segmentation based on our own data gives us a distinct advantage. Our web advertising is more efficient, and we’re better able to target new shoppers.

“Arm Treasure Data also gives us enterprise-grade scale. With the expansion of 5G networks, we expect to collect a significant amount of connected-car data, likely at a volume and frequency comparable to log-data collection. Arm Treasure Data CDP is the only platform we’ve found that will handle that scale of data collection as quickly and flexibly.”

Consolidating customer data in the Arm Treasure Data CDP helps the Subaru team develop meaningful connections with shoppers, enabling delivery of exactly the right content at exactly the right time. Marketers report that, for example, by targeting customer behavior rather than devices, they achieved a 350 percent increase in advertising click-through rates (CTRs).
Improved marketing ROI directly translates into measurable revenue gains and cost reductions. Since implementing the Arm Treasure Data CDP, Subaru has:

<table>
<thead>
<tr>
<th>14%</th>
<th>$26M</th>
<th>31%</th>
<th>2.5X</th>
</tr>
</thead>
<tbody>
<tr>
<td>Used machine learning to boost closing rates by 14 percent</td>
<td>Earned $26 million from a single cash-back campaign</td>
<td>Increased conversion rates from 18 percent to 31 percent</td>
<td>Increased conversion rate for A Grade customer segments by 2.5X</td>
</tr>
<tr>
<td>$1M+</td>
<td>12%</td>
<td>38%</td>
<td></td>
</tr>
<tr>
<td>Increased revenue by more than $1 million for every one percent increase in conversion rate</td>
<td>Reduced cost per click (CPC) by 12 percent</td>
<td>Reduced cost per acquisition (CPA) by 38 percent</td>
<td></td>
</tr>
</tbody>
</table>

Arm Treasure Data CDP analytics and machine learning tools give Subaru marketers the ability to continually refine campaigns. Ogawa elaborates, "We currently use Apache Hivemall, the scalable machine learning library for Hive that is bundled with Arm Treasure Data. In addition, it is now possible to run Python on Arm Treasure Data. The ability to rely on the Arm Treasure Data platform to handle large volumes of data has the advantage of applying variable quantities and high-speed PDCA."
Use predictive scoring for smarter selling

One way the Subaru team uses machine learning is to help dealers focus resources on the shoppers most likely to buy. Oishi Masami, engineer of Digital Innovation at Subaru, says that ten years ago, shoppers typically visited a showroom six or seven times before making purchase decisions. Today, that average is down to just two trips, and shoppers are more likely to do the bulk of their research online. Often the purchase decision is made before they ever walk into a store. "We need to do more than just give dealers a list of prospects. Today, using Arm Treasure Data CDP tools we’re able to use predictive scoring to identify the showroom visitors most likely to buy. Using machine learning, we’ve improved our forecast reliability by as much as 30 percent for 'likely' buyers. That information greatly improves sales efficiency, helping dealers better allocate always-limited staffing resources.

"It’s also important to point out that each of these measures are implemented with the consent of the customer. The ease of managing consent is another benefit of collecting data on the CDP."

<table>
<thead>
<tr>
<th></th>
<th>Human Rules</th>
<th>Machine Learning</th>
</tr>
</thead>
<tbody>
<tr>
<td>Likely</td>
<td>22.2%</td>
<td>52.4%</td>
</tr>
<tr>
<td>Possibly</td>
<td>24.8%</td>
<td>39.1%</td>
</tr>
<tr>
<td>Marginally</td>
<td>20.8%</td>
<td>22.1%</td>
</tr>
<tr>
<td>Unlikely</td>
<td>13.6%</td>
<td>10.5%</td>
</tr>
</tbody>
</table>

Predictive scoring and machine learning improve reliability in identifying likely buyers.
Such consistent results are clearly no accident. “We’re committed to delivering vehicles that provide both peace of mind and enjoyment,” summarizes Omura Toshiyuki, manager of Digital Innovation. “We are a small car company with a global brand. It’s important for us to understand why our customers choose Subaru so that we can continue to meet and exceed their expectations. Arm Treasure Data makes that understanding possible for us.”

“Our marketers originally started using IT technologies like the Arm Treasure Data CDP to help make operational improvements. We continue to fine-tune for efficiency, but we’re much more focused on using data to create value and build lasting relationships with our customers. We’re already, for example, using driver data in the design process. We expect in the future to tightly integrate customer and mobility data with factory data for continual improvement in vehicle design and manufacture. Utilizing CDP for data management and analytics really does help us find more ways to make it fun to own a Subaru.”

For five years running, Kelley Blue Book has named Subaru its most trusted brand and in 2019 counted Subaru among the 10 brands earning the most of its accolades and awards.

According to the American Customer Satisfaction Index, Subaru holds the top spot in satisfaction.

IntelliChoice named Subaru the popular brand with the best overall value.

Prevent farewells

Take a look at Subaru’s internal marketing map of the customer journey and you’ll see a milestone labeled “prevent farewell.” Subaru really does hate goodbyes. Across the corporation, Subaru employees work to ensure that buyers love their cars, love driving them, and love the entire customer experience. In 2018, Subaru actually formalized its goal to evolve from “a company making things, to a company making people smile.”

By all accounts, Subaru is making good on that objective and building a loyal, enthusiastic customer base in the process. Here are just a few of the company’s recent accolades.

For five years running, Kelley Blue Book has named Subaru its most trusted brand and in 2019 counted Subaru among the 10 brands earning the most of its accolades and awards.

According to the American Customer Satisfaction Index, Subaru holds the top spot in satisfaction.

IntelliChoice named Subaru the popular brand with the best overall value.

Such consistent results are clearly no accident. “We’re committed to delivering vehicles that provide both peace of mind and enjoyment,” summarizes Omura Toshiyuki, manager of Digital Innovation. “We are a small car company with a global brand. It’s important for us to understand why our customers choose Subaru so that we can continue to meet and exceed their expectations. Arm Treasure Data makes that understanding possible for us.”

“Our marketers originally started using IT technologies like the Arm Treasure Data CDP to help make operational improvements. We continue to fine-tune for efficiency, but we’re much more focused on using data to create value and build lasting relationships with our customers. We’re already, for example, using driver data in the design process. We expect in the future to tightly integrate customer and mobility data with factory data for continual improvement in vehicle design and manufacture. Utilizing CDP for data management and analytics really does help us find more ways to make it fun to own a Subaru.”

5 https://www.kbb.com/new-cars/brand-image-awards/most-trusted-brand/
7 2018-2019 American Customer Satisfaction Index Survey of customers rating the performance of their own automobiles.
8 2019 IntelliChoice Best Overall Value of the Year, 5-year cost of ownership study www.motortrend.com/intellichoice
About Arm Treasure Data

Arm Treasure Data Customer Data Platform (CDP) empowers companies by delivering rich customer insights that drive outstanding customer experiences. Built on a strong data management foundation, our CDP enables brands to securely unify customer data across silos at scale so they can better identify, engage and acquire customers. The highly configurable platform evolves with your existing technology stack to future-proof all customer data initiatives. Arm Treasure Data is fully owned by Arm and has more than 400 customers including Fortune 500 and Global 2000 enterprises.

See How Arm Treasure Data Boosts Sales and Customer Lifetime Value

Let us show you how our Customer Data Platform (CDP) helps companies like yours transform millions of data points into profitable customer experiences.

Request a demo today | treasuredata.com | +1 (866) 899-5386