



PANASONIC AUTOMOTIVE CREATES A DATA FOUNDATION FOR SUCCESS

Capgemini partners to deliver on the promise of data-driven business

Panasonic Automotive Systems Company of America (PASA) is a leading global supplier of automotive infotainment and connectivity systems. Based in Peachtree City, Georgia, PASA provides innovative and secure automotive products to customers by leveraging its number one asset – people.

A Division of Panasonic Corporation of North America, PASA works to enhance and improve its core technology products in vehicle cockpits. Its engineers find new ways to bring pieces together to solve problems and ensure end-customer value. It prides itself on its culture and empowers employees to make innovative decisions.

Overview

Client: Panasonic Automotive Systems Company of America (PASA)

Region: North America

Industry: Automotive

Client challenge:

PASA wanted a better data platform to move away from manual processes that made timely access to data a challenge

Solution:

PASA coordinated with Capgemini to build a foundational data platform on Microsoft Azure with Power BI in six months to provide better insight into the business

Benefits:

- Eliminated manual processes and created standard documentation
- Better access to data; tables can be pulled and validated in a day rather than taking weeks so decisions can be made in near real-time
- Development team spends less than 20 percent of its time on support compared to 50 percent in the old system

Tackling data issues

PASA needed a better data platform to move away from manual processes that made timely access to data a challenge. Documentation could also be a problem, and limited data-analysis tools left the company reacting to problems rather than analyzing the roots of inefficiencies in real-time.

“Data is a foundation for being able to weave different parts of our organization together in ways that deliver value,” says Scott Kirchner, President, PASA. “Data centricity is really about understanding how a piece of our business is operating, versus instincts or intuition. Where are we really making money? Where are we not hitting our targets?”

PASA chose to work with Capgemini on the first wave of its data project. The pair established an aggressive six-month timeline and, after reviewing the options, chose a new Microsoft Azure platform with Power BI for data visualization, built on a single-instance SAP platform. This uses a wealth of data from across PASA’s business units to create more standardization. The hope was that employees could use SAP to drive efficiencies and better processes.

Creating a powerful data lake

PASA started with a data lake and data warehouse to bring all its information to one place and then use it to look at data differently. “Data really enables our people,” Kirchner says. “If people can see how their piece of the business or another area they are related to is working, they can have more innovation and accountability as to how they can impact operations. It is empowering. It puts information in the hands of the people to make decisions that are going to impact our business and the value we deliver to the customer.”

The new PASA data lake provides a solid, stable foundation for the data team. It provides better quality with more reliable extracts running daily with validation, and the ability to pull information from multiple sources brought new opportunities to see potential issues or concerns. With the old system, the data extracts could take up to a week.

“The data lake allows our business users to make more informed decisions based on getting data more quickly,” says Jake Paris, Senior Developer, Business Intelligence, PASA. “It used to take a week or two to pull a new data table from our old system. Now, we can literally connect to SAP, point it at the tables we want, get the export, and start checking the data quality right away.”

“One of the big things for our data lake was how we can make data-driven decisions,” says Bill Daley, Director of Data and Financial Services, PASA. “In the past, we had to be very reactive. We were making decisions off of reports that took time to compile. Now we have the ability to put the data in their hands faster and that is the real key here. We have only just started to tap the surface of what this data lake can bring.

“The data lake allowed us to see issues we had never even considered or thought about. It was a real driver for us to understand what the data is telling us. It could be a process problem

or something bigger but we are starting to see more possibilities. And that is really where we’ve started to gain the power from having this data lake.”

For example, a sales forecast report was built on customer data. But SAP adds more data to the forecast by providing details on if the material has been set-up and what attributes need to be added. So, instead of just sales numbers, the report now includes information about the customer and product to better understand the forecast. “It was not as simple as taking data from the previous data lake and putting it into Microsoft Azure,” Daley explains. “We went deep into Azure to prepare for today and the future. We did not want to be shortsighted because this is something bigger than a data platform.

“This was about an ability to bring data into a data lake and be able to visualize the data as well as pave the way to bring in machine learning and artificial intelligence in the near future to make the data work for us.”

Building a data story

“It is not just data, it is a story,” Daley explains. “In some cases, people just want to grab data and play with it and that’s great. We will offer that through our self-service feature. But there are other situations when we need to think cross-functionally. These are complex issues or problems and we can bring those groups together to discuss these. The result is building a data story and that is really exciting. We are just beginning to write a few chapters of the PASA story but I know we are going to have volumes and I can’t wait.”



The thing I love most about Capgemini is it is not a single capability they are offering. It is a whole suite from end-to-end, from product engineering services to business process innovation to disruptive innovation and game boarding to determining the next frontier. It is really nice to work with a company that can get to know you so well and be able to bring all of those facets to their business to our benefit. I think they have built up an incredible portfolio capability that can be applied in combination to achieve results.”

Scott Kirchner
President
PASA

In the previous system, a group of employees managed reports. Some worked extensively with the data, running five or six reports every day and bringing them into Microsoft Excel. The result was massive spreadsheets with millions of rows of data and employees spending three or four hours a day assembling tables and updating pivot analyses.

The efficiencies have been significant. In the previous environment, it would take the team seven to eight hours to extract the data. Now, it is about half the time and refreshing reports only takes about 30 minutes rather than two hours. Microsoft Azure also improves cost management by supporting scaling up and down using transparent monthly per-unit pricing. PASA can now spin up in real-time rather than plan upgrades.

"I have a finance background so I love Microsoft Excel," says Daley. "But the bottom line is Power BI's ability to churn millions of rows of data is much more powerful than anything we will do in a pivot table. If you are going to be data-driven, you need performance. No one wants to ride in a car that shuts down every few minutes. You need reliability all the time and that is what Microsoft Azure brings."

Planning for AI and ML

Also attractive to PASA was Microsoft Azure's connection to other Microsoft tools that will help with its future AI and ML plans. The company plans to explore how external forces affect the data. By introducing variables, PASA can leverage business insights using analysis AI and ML.

"AI and ML are really going to help PASA tremendously because we have tons of data," says Paris. "As we stabilize and mature our data platform, get more external data sources and draw from systems other than SAP, we can start to build algorithms that can predict

failure. We can do things that predict machine maintenance cycles for our factories. We can triage defects that come in from customers and help speed up the time to fix those bugs more quickly."

Innovating for a data-centric future

"Our mission here is to innovate, develop and, more importantly, get the data in the hands of our users," says Daley. "We used to spend around 50 percent of our time on support in the old system but now we are seeing that time drop to about 20 percent or less. If we are spending time having to work with the platform because it is not running, we are not getting data to the people who need it."

Rather than constantly fighting fires, the PASA data team now spends little time on support, since the system is much more stable. Instead, they focus on development and getting new products out the door.

"I am proud to say this project was a smashing success, says Daley. "We ended on time and on budget. It doesn't get any better than that. We said early on that we cannot focus on the things we can't do. We have to focus on the things we could do. And that changed how we viewed the project and kept it focused on the right things."

"The best thing that helps our business leadership is getting the data into their hands more quickly," says Paris. "With Power BI, we can really put together a story and give our executives reports so they can make well-informed, data-driven decisions."

With the first wave of the project complete, PASA and Capgemini are now working on additional refinements and new innovations.



In these kinds of projects, you learn about team talents. Capgemini was always willing to re-evaluate their team, bringing in expertise, checking we had the right people and making changes when needed. This is a team and we are here to win. If one of us doesn't perform, we all lose. It is that simple."

Bill Daley
Director of Data and Financial Services
PASA



The collaboration with Capgemini was outstanding. This is probably one of the best teams I have ever worked with and I am very excited to be part of this team. It has really been a great journey with them and I have nothing but good words to say about that team."

Jake Paris
Senior Developer, Business Intelligence
PASA



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