



CarParts.com

GAP **CASE STUDY**

CarParts.com is a technology-driven eCommerce company improving the way drivers shop for the aftermarket auto parts they need, including collision parts, engine parts, and performance parts and accessories.

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Service: [Technology Architecture Assessment](#) and [Technology Application Assessment](#)

Industry: [Automotive/Retail](#)

Tech Stack: [AWS](#)

OBJECTIVE

GAP's client, a leading online retailer in the automotive industry, was looking to invest in the further modernization of its technical operations, ranging from improvements to its eCommerce and infrastructure platforms, to improving its applications. The issue facing CarParts.com was not one of implementation or getting information in. Rather, the client wanted a trusted technology partner to look at the wider macro ecosystem and total addressable market, and be able to advise based on their myriad of project experience.

The ideal result was for the client to understand where the key areas were to modernize — which parts of their stack they should rehost, re-platform, re-target, refactor or retire respectively, as well as automation opportunities. CarParts.com also needed to understand whether they were on the correct path for their technology transformation tied to business impact to be able to drive long-term business value.

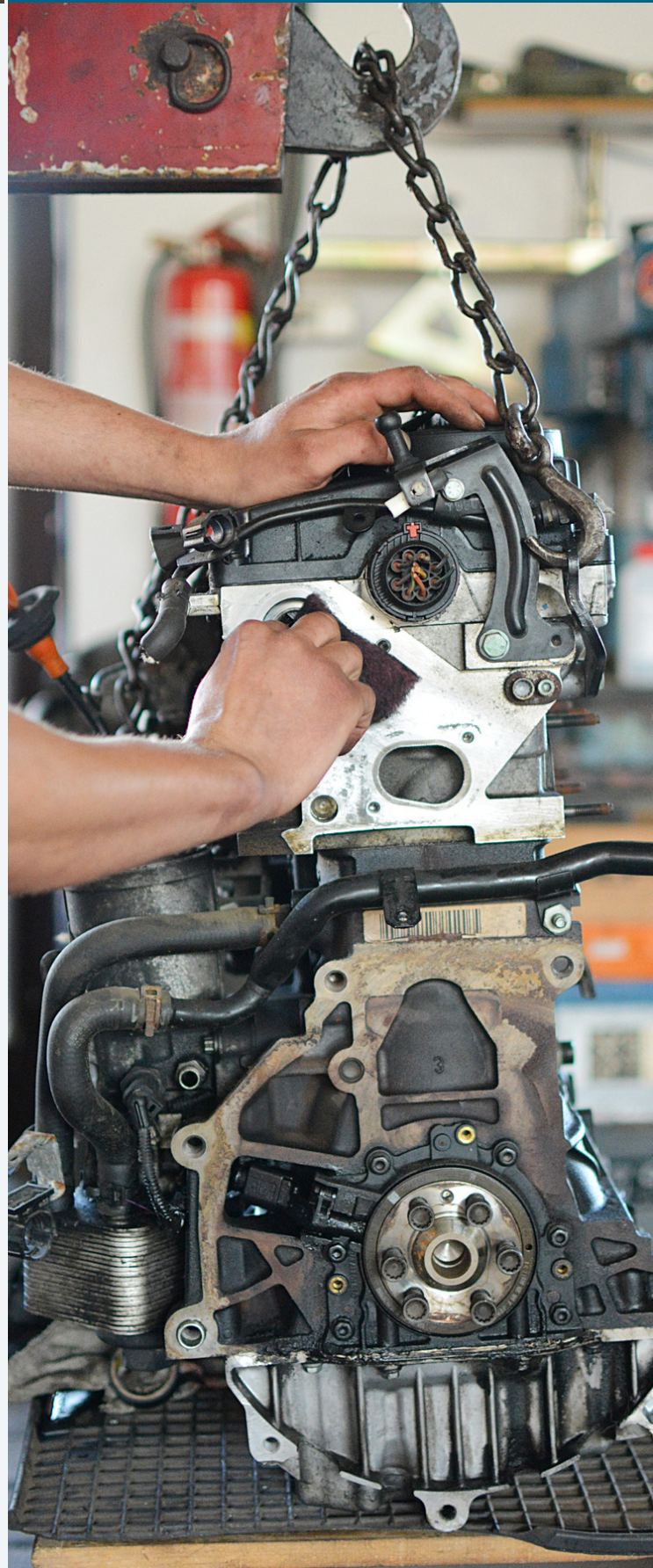


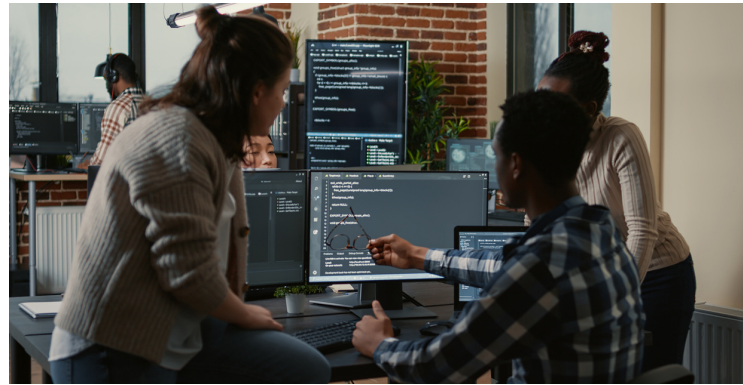
 **SOLUTION**

GAP put together a series of deliverables to help achieve CarParts.com’s outcomes. The initial step was to put together a technology modernization roadmap and architecture, as well as understanding which part of the modernization process applied best to each aspect of the estate. The “as-a-Service” options CarParts.com utilized in AWS — ranging from SQL and NoSQL databases, to the ELK stack (Elasticsearch, Logstash, Kibana), which assists with logging and infrastructure monitoring — would be re-platformed, while supply chain software Körber would be retargeted to a hosted solution.

With regard to automation — seen through a long-term lens — the eventual goal was to begin almost every process with an automation mindset, from CI/CD and IaC, to data synchronisation and testing. The wider process can be summed up in converting monolithic applications to a MACH (Microservices, API-first, Cloud-Native and Headless) architecture.

GAP’s roadmap extended beyond technology. From a cultural standpoint, the recommendation was to form small teams around domains and services, again noting more flexible architectures, as well as advising on how to build a successful DevSecOps culture, based around the “release early and often” mantra. The final deliverable was to create a business continuity plan, which was formalized as a robust disaster recovery plan, satisfying both RTO and RPO requirements as defined by the client.





IMPACT

The goal for CarPart.com's CTO was to be able to scale to industry and market level, which in his opinion necessitated external consultancy. The company also needed to create a methodology to bring everything together and present a summary that articulated the overall ecosystem. The client was satisfied with the deliverables and macro view outlook, which helped reinforce and better articulate their vision. This enabled the CTO to get vital buy-in from the board to invest in this transformation.



ADDED VALUE

As part of the overall roadmap, GAP provided multiple scenarios for each deliverable. For example, when creating the business continuity plan to satisfy RTO and RPO requirements, GAP proposed multiple disaster recovery solutions, as well as recommended a solution balancing cost and risk factors. Alongside this, GAP's service provides regular touchpoints, including six hours of virtual follow-up time to be used by the client as needed.

