

Customer Data Management in the Automotive Industry: Creating Value



People matter, results count.

Customer Data Management

If automotive companies are to succeed in putting the customer at the center of their businesses, they need the right data management approach. Developing this approach requires effort in terms of both strategy and technology, but it will improve customer experience and bring companies competitive advantage. Key requirements include a customer-centric business and IT strategy to align stakeholders, a customer data model with a unique identifier for each customer, a central customer database and data integration layer, and a lightweight governance model that focuses on the most valuable customer data.

Automotive companies know that they have opportunities to create significant extra value by building loyalty and by cross-selling and upselling. First, however, they have to be able to provide customers with the type of experience that they want. The main obstacle to doing so is the issue of getting the right customer data, which also underlies many of today's customer management challenges.

This paper outlines our recommendations in this area, which are based on deep experience with leading OEMs in both premium and mass-market segments. We'll argue that companies need to move away from today's vehicle-centric view to a customer-centric view, and describe a new approach to managing data that makes this possible.



A better customer experience plus more value for OEMs

Automotive companies are facing a paradigm shift from a vehicle-centric business to a customer-centric one. From the OEMs' internal point of view, the main motivating factor for this shift is that they want to sell more products and services to the customer throughout the whole customer lifecycle, and increase repurchases. In addition, OEMs increasingly

want to sell vehicles and services directly to the customer, without the dealer as intermediary. From the customers' point of view, the motivator is that they increasingly want to have a direct conversation with the OEM (via websites, social media, etc.), throughout the whole customer lifecycle: interest, purchase, ownership and repurchase.

Moving from a vehicle-centric to a customer-centric paradigm

Currently, manufacturers run their business around vehicles, not customers. This lack of a customer-centric view leads to problems such as:

- Customer service doesn't match the quality of the car, mainly because an individual can't be identified along the customer journey.
- OEMs have difficulty in obtaining management information to support decision-making.
- Although many OEMs do now have a direct sales channel, it can be difficult to operate successfully because of the lack of information about customers and their previous contacts.

OEMs now need a true 360° view of the customer, which will result in a better customer experience and bring additional value for the OEMs themselves.

For customers, there will be coherent, targeted communication, a consistent experience across multiple channels, and faster and more responsive support. Customers will receive offers that are better targeted to their needs and incentives that appeal to them.

For OEMs, there will be higher customer retention resulting from increased satisfaction. Better management information will enable process improvement. For example, a company could use predictive analytics to understand when a customer is likely to repurchase and take steps to build loyalty at the right time.

OEMs will also have more opportunities to connect with the customer, opening up more possibilities for cross-selling and upselling (including insurance, mobility services, and even additional cars). These initiatives will achieve a higher success rate as a result of better targeting. Messages like "other customers who were interested in x also ordered y" will become the norm for the industry.

Challenges in customer data management

Although some OEMs have already started working towards a 360° view of the customer, they are encountering a number of challenges.

One is the **lack of a clear data structure shared by the whole company** (OEMs typically have several hundred systems of which a significant number include customer data, unaligned and unsynchronized). This lack is related to the fact that OEMs are large and complex and have many departments such as sales, marketing, aftersales, finance and insurance, each of which operates as a silo and “owns” part of the data. Putting all this data together therefore presents both a management and a technical challenge.

Another, and arguably even more challenging, aspect of the data ownership issue is that **customer data is currently distributed across three levels** – OEM, wholesale and retail – corresponding with the established sales process. Most data is collected by the dealer, though the OEM is becoming more important in this regard. Technical and management barriers and sometimes legal ones too can

make it hard to share and integrate data across the three different levels.

A very important challenge is that there’s currently **no way of reliably identifying a customer**. When a customer contacts an OEM, they’re typically asked to identify themselves with a vehicle number or license-plate number.

Integrating data from external sources, such as social media and business partners, with internal data is necessary to complete the 360° view. However, this integration can again be difficult because of the lack of shared reference points and a common structure.

A further challenge is **assuring the quality of data**. Decisions need to be based on accurate data, but what is important to an OEM’s decision-making may be less important to a dealer – still usually the main customer channel – and vice versa. Data quality depends in part on finding ways to align the two sets of objectives.

What companies should do

To overcome these challenges and build the necessary 360° view of the customer, a company needs to tackle both management and technical issues.

1. Put the customer at the center

The management approach must be aimed at creating a customer-centric business and IT strategy that aligns all stakeholders. To implement such a strategy, the company needs to break out of the silos and transcend the three business levels so that customer data can be assembled into a holistic view of the customer that makes it possible to focus on what that customer wants.

This will only happen if all stakeholders are mobilized around the customer. A collaborative setting such as Capgemini’s Accelerated Solutions Environment (ASE) can help to initiate this mobilization. After that the organizational change needs to be actively managed. Having cleared the way for sharing of data across silos and industry levels, the company needs to manage the ongoing organizational change.

The aim should always be to obtain a global view of the customer journey throughout the lifecycle, from interest to repurchase. This view must include all interactions with the business, and all products and services used (including vehicles, accessories and parts, service contracts, leasing, insurance and telematics).

The current IT landscape needs to change radically if it is to deliver a necessary 360° view. Data silos, lack of data synchronization, inconsistent ways of identifying the customer – all these obstacles need to be overcome. Our remaining recommendations address these issues.

2. Create a corporate customer data model and define what makes a customer unique

To give everyone a common language for talking about customer issues, it’s important to agree a data model and data dictionary with shared definitions of key data about vehicles, customers and suppliers, and a shared data hierarchy. It sounds hard, but from doing this exercise with

two of the largest OEMs from different continents, we know it really is possible to create such a baseline in a large, heterogeneous IT landscape.

The company must choose a set of attributes and a single primary attribute for identifying an individual customer, and rethink the IT landscape to support this identification. It should explore whether it's viable to assign a new ID and motivate customers to use it. Unlike, say, Apple, the industry can't force people to use an ID so success will depend on offering some value in return – for example, a special offer or discount on registration. Otherwise an existing identifier such as phone number or email address will have to be used.

With the model and identification method in place (Figure 1), it becomes possible to combine and harmonize data from all sources and turn it into information and insights to guide the business. The model and identification method also provide a basis for designing the future IT landscape to support customer uniqueness. Making this happen is a task that will touch many different areas of the IT landscape. Success depends on senior management support and the right architecture skills.

3. Build a central customer database and connect customer processes with a dedicated data integration layer

The company should introduce a central customer database to store data that needs to be shared between customer processes. Automated data matching and cleansing mechanisms must be put in place to ensure data quality.

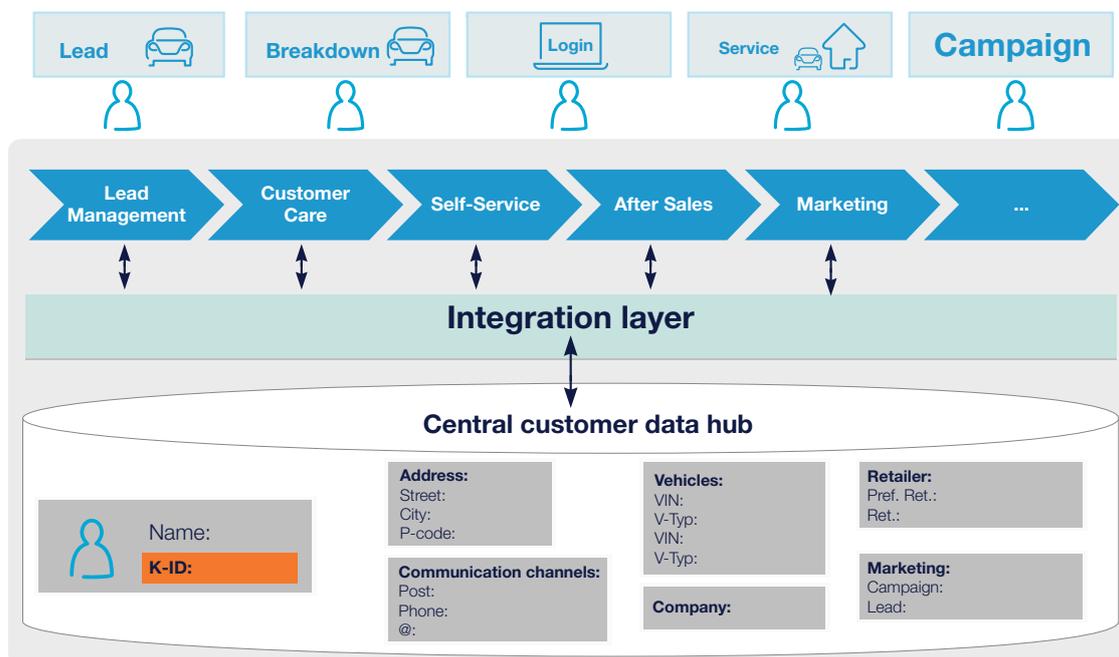
A dedicated data integration layer should be used to connect customer processes to the central customer database. The integration layer enables the customer data model to be used throughout the lifecycle (from interest to repurchase). It may incorporate data transformation and mapping capabilities to accommodate different data formats and interface technologies used in the various customer processes. Another advantage of a separate integration layer is that it decouples data synchronization from main processing for better responsiveness. The integration layer is the IT part of the governance model (Figure 1), bringing stakeholders and their IT systems together. It defines business and security rules for dealing with the customer data.

The layer also makes it possible to offer different levels of integration to support stakeholders in implementing the change to their way of working. With the integration layer in place, guidelines should be created to ensure future systems development uses it.

4. Adopt a lightweight governance model that focuses on the most valuable customer data

The common data model and integration layer provide a starting point for data governance. Another key success factor for governance is a common vision. This should be agreed on by all stakeholders, not just handed down by top management.

Figure 1: Integration layer for customer data



A governance model is needed to turn the vision into reality. Elements include:

- Processes that implement the change must be set up and monitored in a measurable way.
- Roles and responsibilities have to be defined and agreed.
- A detailed decision plan is needed to coordinate many different departments and perhaps multiple organizations. The plan must define who should decide the contribution

of a specific department or IT system to the complete change project, and when they should make this decision.

- The commitments embodied in the model must be signed off and integrated into a senior management reporting structure to make them widely visible. Although the model is important, 80-90% of governance is communication: not of a single message, but of many messages addressing many people and needs. With appropriate communication, motivation can be maintained throughout the change period.

Data governance with lean master data management

To implement governance, we recommend applying a lean master data management (MDM) approach to customer data, with a focus on the most valuable data. Data should be clustered into the following four areas, each with its own governance policies (Figure 2).

- **Core:** This information is required for unique identification of the customer. It is the area where quality has to be highest, and where the greatest investment is made. Central policies need to be agreed and then enforced consistently across the organization. Core information must always be synchronized between customer-facing processes.
- **Sync:** This information is common between systems and is modified in multiple places; therefore it needs to be synchronized. Relevant organizational areas must agree on a common policy regarding issues such as information latency.

Although less rigor is needed than for the core, the impact of disparate quality rules will rapidly become apparent.

- **Share:** This information needs to be shared operationally, but has a clear business owner with sole responsibility for its quality. The governance of the information remains with the business owner who creates it, and the information is not considered available for modification by other business processes. The information is synced via the integration layer, but changes are made to just one data source.
- **Local:** Large swathes of information are better left in their source systems, and shared directly from them. Service-Oriented Architecture (SOA) based approaches can make it available for operational use. Leaving data in its source system rather than moving it into the “Share” area reduces information latency and keeps governance as close as possible to the data owner.

Getting started

By adopting this approach, it's possible to overcome customer data challenges and provide the business with the control it needs to maintain stable, high-quality information. Some broader issues need to be overcome in parallel. For example:

- It's important to align stakeholders' views on data quality and ways to manage data – this necessitates a rethink of relationships within and between companies, which

is already starting to happen. We believe everyone will come to realize that sharing data is in their best interests, particularly if the consumers who own the data want it to be shared, as they usually do if they can obtain value from sharing.

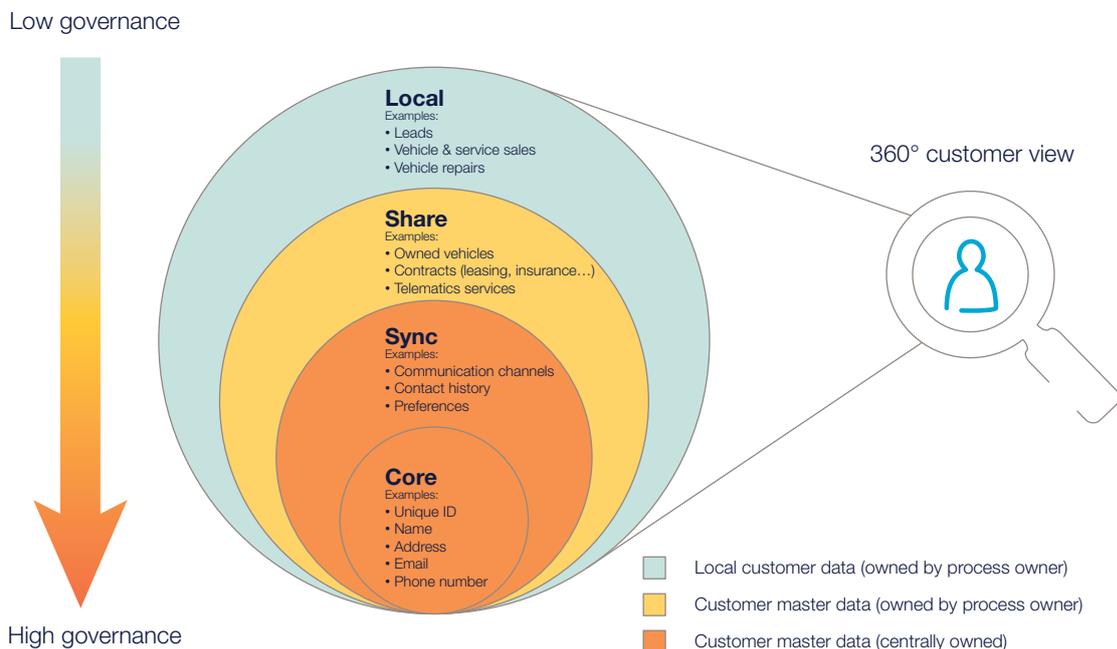
- It's necessary to secure senior management buy-in because the company will be investing in activities that don't pay back straight away.

- To achieve the changes needed, companies need to review the way they manage development projects, bringing IT closer to the business and adopting more agile project management approaches.

To help with these issues – and to ensure success – we recommend working on a small set of important use cases

that involve about 80% of the data. The “quick wins” will demonstrate the value of sharing data, and of the whole exercise. When decision-makers see more hits on the web page, or more customers come into the dealership to follow up something they’ve found online, the point of customer data management will become clearer.

Figure 2: A lean MDM approach focuses on the most valuable customer data



Conclusion

Some of these recommendations may seem premature, because customers by and large do not currently expect personalized service for cars. However, they are rapidly developing these expectations based on their experience in other sectors, and automotive companies need to prepare.

As this paper has shown, adopting the right approach to customer data management provides a new way

for automotive companies to organize their business around the customer, and ultimately to build a stronger relationship that is valuable for both the customer and the OEM.

By doing this early on, companies can secure a strong competitive position in the future marketplace.

For more information
please contact:

Thilo Marquardt

Business Technology, Automotive
thilo.marquardt@capgemini.com

Markus Hein

Business Technology, Automotive
markus.hein@capgemini.com

Sven Kufer

Business Technology, Automotive
sven.kufer@capgemini.com



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