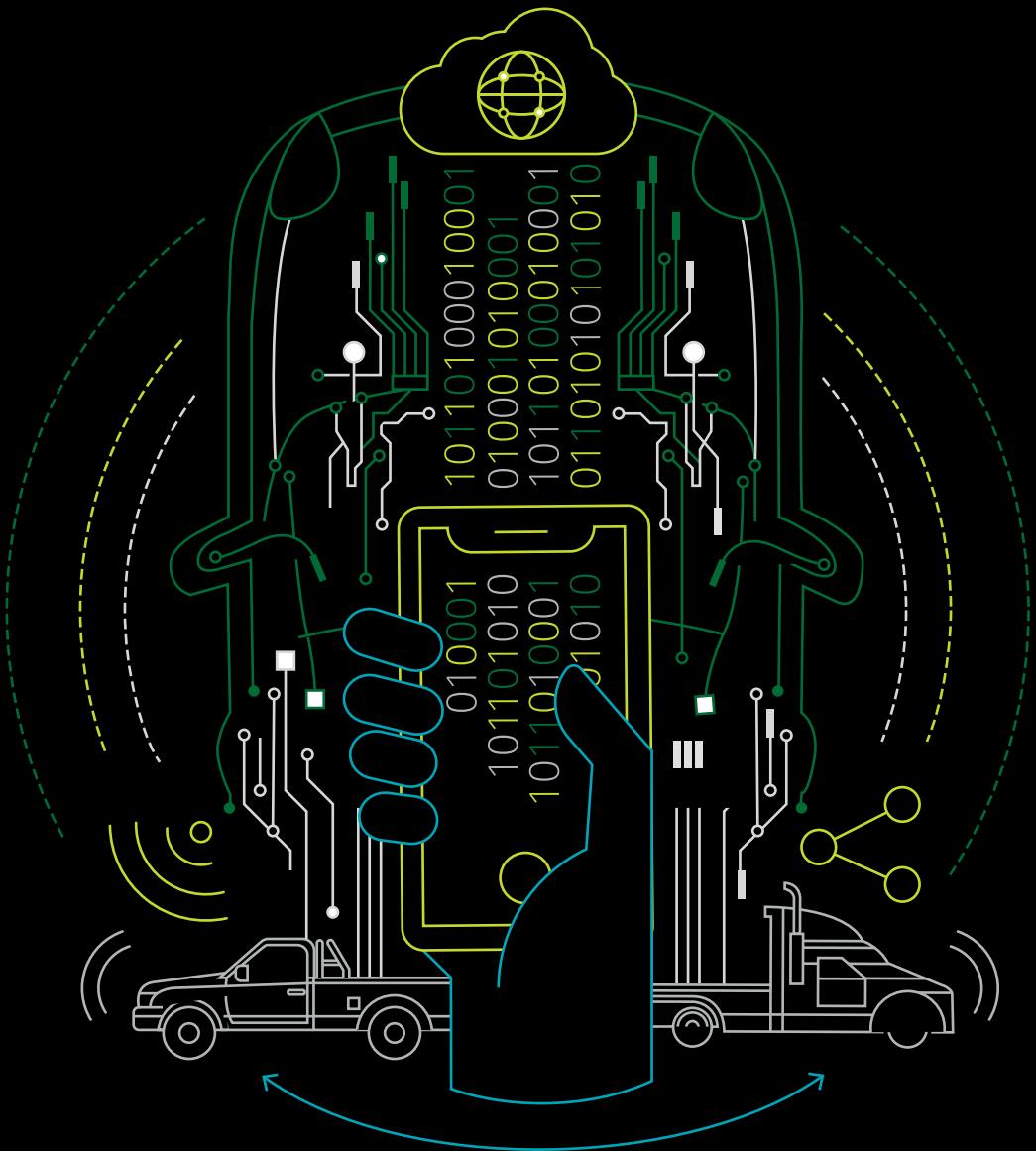


Deloitte.



Analytics & Automotive Captives
Innovative Solutions of a Market Leader

From the Money Bank to the Data Bank:
Do not miss out on exploiting your
potential for transformation.

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The Future of Automotive Captives

Development of new capabilities with simultaneous optimization of the existing ones?

We are currently observing the emergence of a completely new mobility ecosystem. Driven by socio-technological trends such as the "Sharing Economy", the way how we transport goods and people will fundamentally change. Especially in cities, we expect that the mobility patterns of tomorrow will be marked by the widespread use of shared and autonomous vehicles.

This emerging transformation will put pressure on today's strongly asset-based business model of the (established) automotive captives. The increasing prevalence of sharing and subscription models, autonomous vehicles, the market entry of new competitors (e.g. service-oriented FinTechs) and a change in customer demand act to force these service providers to transform their business model into a service-based model.

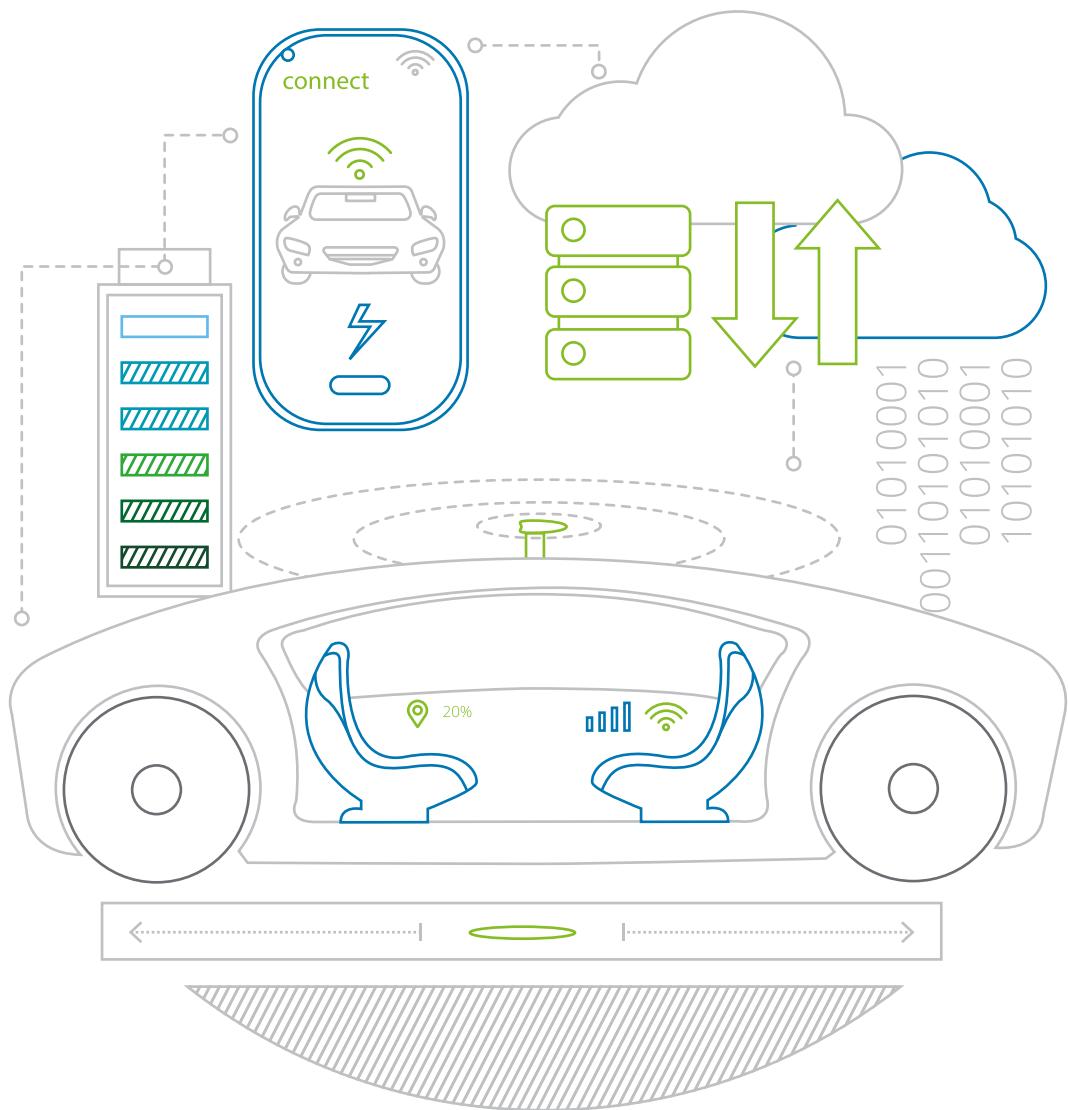
This is accompanied by a high demand for investment. The funds required must be earned in the traditional core business, wherefore the optimization of this business needs to be pushed.

This is aggravated by the fact that present margins in asset-based business have come under pressure due to rising interest rates, declining sales volumes and increasing competition. All the more, this requires the prioritization of existing resources and a targeted capacity building (e.g. analytics-based) in the following areas of the traditional business model:

- Increased efficiency of existing processes
- Improvement of the residual value management
- Compliance with increasing regulatory requirements
- Customer-centric product range
- Development of flexible connected products with pay-per-use models
- Expansion of services (e.g. fleet management, payment services and mobility services)
- Data-based offerings

With respect to the future offering, analytics solutions will become one of the key factors for agile and reliable processes. Data analytics solutions, for example, help to ensure that the necessary information is constantly provided for viable decisions in an uncertain and dynamic future.

Within our "Future of Captives" study, we have identified six strategic fields of action. Independently of the future scenario, automotive captives should address these topics in order to be ideally positioned for the future. Analytics solutions constitute an essential element for success in these complex spheres of action.



Tab. 1 – Analytics examples based on the “Future of Captive” fields of action*

Strategic fields of action	Exemplary analytics solutions
 (Multiple-brand) fleet management	<ul style="list-style-type: none">• Forecasting model for the total costs of all fleet vehicles over their life-cycle• Forecast of the necessary maintenance work based on the analysis of real vehicle data
 Flexibilization of core business	<ul style="list-style-type: none">• Analysis of the residual values to optimize the range of products and services (for details see page 9)• Automotive Social Sensing for the customer-centric orientation of the financing/usage models
 Captive payment services	<ul style="list-style-type: none">• Live fraud detection during payment transactions• Usage/consumption-based billing models
 Operational excellence	<ul style="list-style-type: none">• Analytics-based residual value management: e.g. forecasting model to identify the optimum time for the proactive vehicle exchange• Robotic process automation (RPA)
 Urban mobility solutions	<ul style="list-style-type: none">• Live GPS-based position detection within the service territory of the fleet vehicles to optimize the distribution of the vehicle locations• Personalized convenience and entertainment services based on the live analysis of vehicle interior data
 Data monetization	<ul style="list-style-type: none">• Insurance models based on real life driving behavior of the customers (“Pay how you drive”)• Analytical Customer Lifecycle Management (for details see page 10)

* For further information about the six strategic spheres of action and their future relevance, please read our “Future of Captives” study.

Analytics @ Deloitte

Analytics is a decisive vehicle for the successful transformation of automotive financial service providers

For many years now, analytics has been an elementary part of a decision-maker's daily work designed to provide transparency on business and market situations and their evolutions. In most cases, the top priority is to identify and assess new ways to optimize and extend the existing business model.

Analytics in the current generation greatly benefits from artificial intelligence and the disciplines of Machine Learning, Natural Language Processing/Generation (NLP/NLG) as well as Neural Networks for recognition and processing of images.

Today, the technical and methodological advances enable analysis and simulation procedures, which use a wide variety of data to deliver recommendations for decisions or to facilitate automated decision-making. Prominent examples are applications relating to:

- Individual profiling of customers
- Assessment of chances and risks of the own business in the context of volatile market conditions
- Derivation of the next best options for action (Next Best Offer)

In the environment of the Captives, it is more important than ever to leverage analytics to find the right answers to challenging issues. This includes the target customer approach, the positioning of personalized mobility services, the integrated and efficient use of direct sales channels as well as compliance with regulatory requirements.

Deloitte has acquired outstanding expertise in the design and realization of successful analytics programs. In this connection, Deloitte supports its customers from the vision and strategy development through

the customized implementation of innovative use cases up to the industrialization of the analytics solutions.

You too can benefit from proven analytics solution modules from the fields of customer journey, social sensing, digitization of processes and telematics, as well as risk and fraud detection. Two selected use cases are presented below:

- Option Optimizer
- Analytical Customer Lifecycle Management

Due to failure to optimize options for new vehicles, OEMs and Captives fail to exploit significant margin potentials in the remarketing.

Exemplary Use Cases for Analytics Solutions

Option Optimizer – analysis of the residual values to optimize the range of product and services

In our view, the considerations about the residual value of a vehicle have their starting point when the new vehicle is being configured. The product management functions and sales organizations are required to find an attractive combination of trim levels and price.

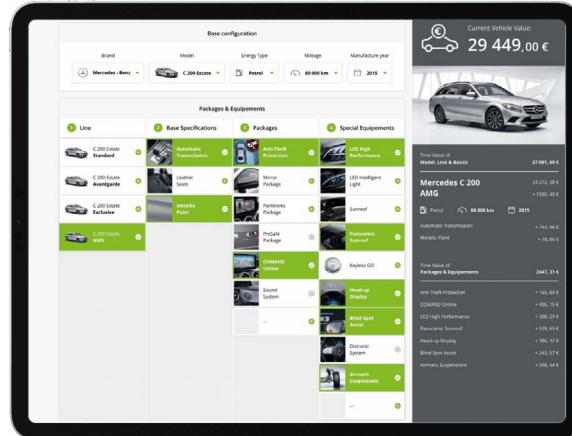
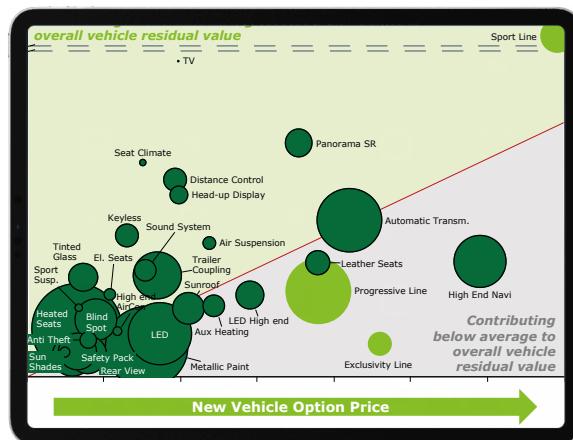
Whether an option has measurable effects on the residual value of a vehicle could so far not be substantiated in a structured format and thus has not yet been taken into account.

Partnering with mobile.de, Deloitte has access to millions of data records of multi-vendor used-car offers. These offers can be edited using NLP; afterwards, analytics is used to establish relations between equipment features and the vehicle value.

An intuitive visualization tool enables the specific effects on the residual value depending on the equipment, age and mileage of each vehicle to be shown.

Using the Option Optimizer, improvements of the offering structure, adjustments of leasing offers through options to optimize the residual value, and more precise residual value forecasts can be easily realized.

Fig. 1 – Example Views of the Option Optimizer



Analytical Customer Lifecycle Management – increase in sales through customer loyalty

To meet the challenging task of providing personalized support to the customer throughout all steps in the product lifecycle, Deloitte has developed the Analytical Customer Lifecycle Management.

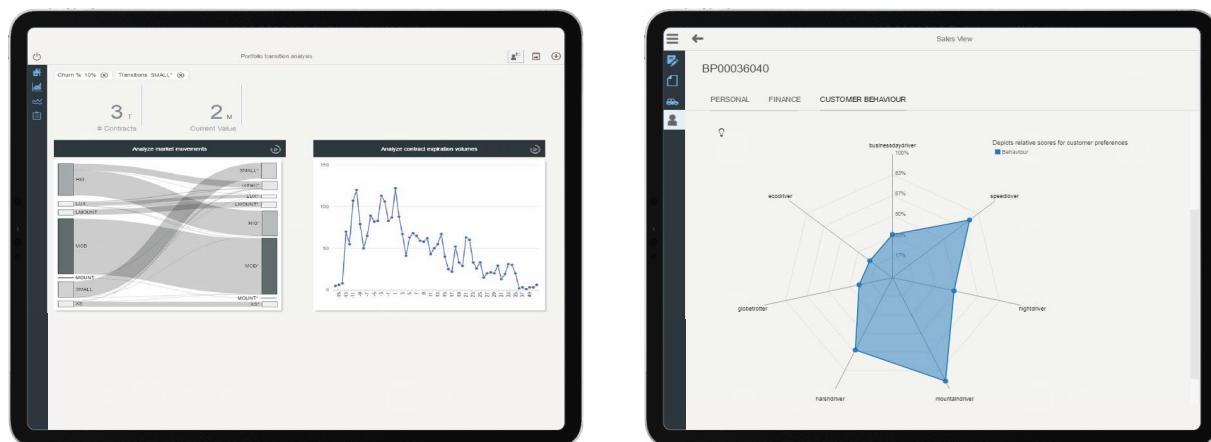
Against the background of the discussion on residual values and the increasing customer focus, this offering facilitates the personalized creation of vehicle and leasing offers. To this end, based on customer, contract and vehicle data, the intersection between vehicle and contract residual value as well as

an indicator to measure the customer value are being determined.

Thus, before the expiry of an existing customer contract, a targeted personalized offer to purchase or lease an individually pre-configured vehicle can be presented to the customer.

The user-friendly interface of the Analytical Customer Lifecycle Manager enables the provider to find answers to questions such as: What will my customer buy next? How can high-potential customers be identified and incentivized? What opportunities are there for cross-selling and up-selling?

Fig. 2 – Example Views of the ACLM



Automotive Captives @ Deloitte

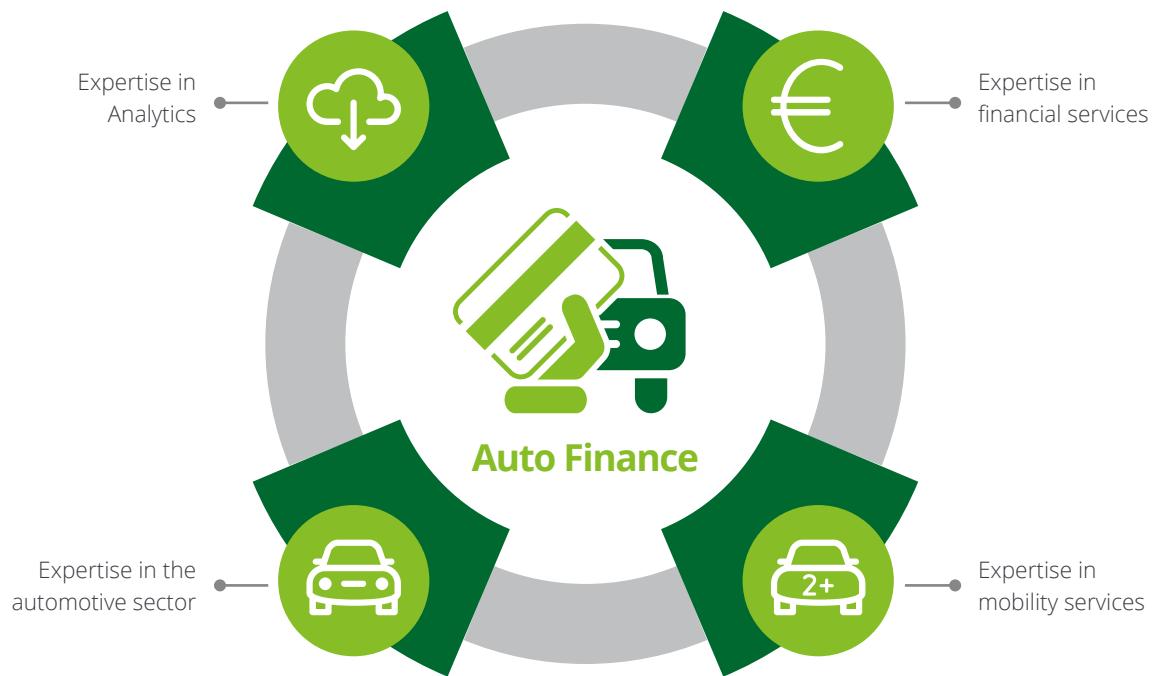
How Deloitte can support you

A transformation of today's business model of the automotive captives is necessary to continue their success story. The integrated deployment of Analytics in all divisions and the data-based assessment of opportunities and risks are indispensable for this.

Our extensive industry experience and comprehensive expertise (e.g. in Analytics Information Management) enables Deloitte to offer to your organization the right support worldwide.

Fig. 3 – Auto Finance Practice @ Deloitte

Committed Team of Experts from different disciplines



About us

The Deloitte teams have an impressive track record in the cooperation with automotive captives in more than 30 countries. In addition, we maintain an extensive presence in the centers of the automotive industry in Europe, the U.S.A. and China.

The combination of expertise in automotive production and in financial services allows us to provide comprehensive consulting services to our customers.

Fig. 4 – Our Customers

89%

of the automobile manufacturers listed in the Fortune Global 500



92%

of the financial service providers listed in the Fortune Global 500



100%

of the Top 25 of the automotive financial service providers



Selected Publications

Based on our understanding of the auto finance industry, we continuously issue specialist publications in which we address the current market trends and their drivers as well as highlight how these trends will shape the future of the automotive financial service providers.



Future of Captives

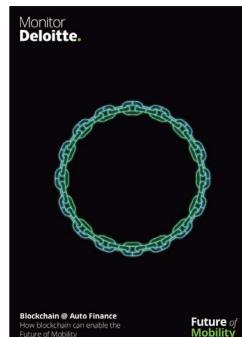


Omnipresence of services & direct sales auto finance



Sitting in the driver's seat

Further information about Automotive Captives @ Deloitte can be found under:



Blockchain @ Auto Finance



Fleet management in Europe



Fleet leasing & management in North America

Contacts



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