INJECTING DIGITAL INTO AUTOMAKERS' ORGANIZATION

IT to spread beyond products and back office

CARS ARE NOW crammed with sensors and electronic devices. Some of these digital additions improve performance on traditional tasks, making engines and brakes more efficient and safe. Other tools, such as autonomous driving systems, are fundamentally transforming the way cars are used.

The next digital revolution, however, will fundamentally change how automakers use IT in every aspect of the organization. The use of robotics in production is the most obvious step, but still-greater benefits will come from employing digital technology in white-collar areas such as customer interaction and product design. These functions are ripe for transformation by cloud computing, machine learning, and data analytics.

Digital transformation is a huge task. One complication is automakers' legacy systems: While these old systems are adequate for traditional back-office work, a companywide IT transformation could result in a disruption to the normal workflow. Moreover, digital tends to operate best on nimble, daily decisions and frequent releases and updates to technology. These decisions reflect continuous changes with regard to competitors and markets. Wide-ranging change may be outdated by the time it is completed.

Automakers will have to decouple their front- and back-end systems to allow for digital implementation at different speeds. Different areas should be freed up to develop new systems and agile processes. Alliances with digital startups will be necessary, as will new types of staff.

EXHIBIT 1: HOW IT CAN TRANSFORM AUTOMAKERS' BUSINESS

An IT strategy needs to create tangible value in at least six dimensions

SPEED
Time-to-market for new digital products and end user functionality: from >6 months to <3 weeks

DATA INSIGHT DRIVEN/
DIGITAL MARKETING AND SALES,
ENGINEERING AND PRODUCTION
Increase in customer lifetime value
> €1,000, client retention up to 10pp

CUSTOMER INTERACTION
Launch of new digital businesses in <9 months

IT VALUE PROPOSITION
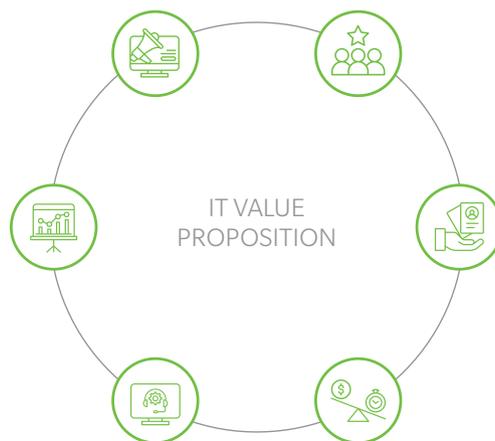
THE EMPOWERED EMPLOYEE
User Satisfaction Rate up 5-7 pp

ASSURED CAPABILITIES
Become attractive to tech talent
Reduce legacy technology maintenance effort down while total staff stable

SCALE MADE CHEAP
Cost-to-serve in digital service business <€12 each year versus >€40 in established business
Change/run IT cost ratio towards 60/40

Source: Oliver Wyman analysis

Here are three key ways IT can transform automakers' businesses:

DIGITAL CUSTOMER RELATIONS

Smart use of IT in customer interactions could radically cut marketing costs and yield new ways to retain customers and new opportunities to offer them services. Traditionally, automakers have spent heavily on everything from advertisements to test rides, with mixed results. Digital marketing can be more precisely targeted. At the most basic level, a Google search may prompt an ad for an automaker's financing arm. Alternatively, a carmaker may send tailored, follow-up proposals to people who have been using a configurator.

But a detailed knowledge of customers can take digital marketing further. A vast amount of customer data enters the wider auto industry, making a kind of golden customer record theoretically possible. An automaker could run advanced analytics on the data and come up with recommendations for products and services.

No major automaker has fully succeeded in doing this yet. Most sales go through dealer networks, which are separate organizations. Dealers lack full access to all the data that would be of use to them, preventing them from playing a greater role. For instance, a potential customer might first configure a model online before visiting a dealer, but the dealer typically has no way of knowing this. Automakers have direct contact with customers through their financial services departments, but these often outsource their data management, and so the data is hard to obtain. As a result, neither automakers nor dealers know all that much about their customers and so they cannot effectively predict what products or services to offer and when.

A first step towards getting hold of more data is to keep in better touch with the customer: remind them to have regular inspections and engage them on social media. Automakers should also involve dealers and financing arms to develop a centralized "golden" record of customer interactions. This can be implemented by creating a multichannel digital customer experience, involving online and offline touch points. Link website front ends, such as configuration and financing pages, to connect online and offline worlds. In this way, a dealer will have automatic access to the car models and features a customer has been considering.

Effective data management could be the trigger for digital marketing to take off in the auto industry. And the payoff could be huge: Currently, it costs more than 3,000 euros on average to get a customer to buy a new car. We think digital marketing will reduce this to 1,000 euros.

TIME TO MARKET

Upgrading an infotainment or navigation system typically takes more than six months from conception to launch, limiting the number of updates to two per year. That is no longer good enough: Drivers are smartphone users, and are conditioned to expecting frequent software updates to fix glitches and improve performance. Automakers need to develop a structure that promotes agile development so they can get new products to market faster.

Ceaseless experimentation will allow innovations to be turned rapidly into pilots and to be improved through iterative, incremental processes. Participants from multiple functions should be encouraged to work with agile development methods and speed feedback cycles: Continuous integration of different components will mean testing can be done on a daily basis.

By building and maintaining the right organizational ecosystem, automakers could reduce the digital product release cycle sharply: Small-scale improvements could be done in under a week, incremental changes within a day or even faster.

SCALABLE EFFICIENCY

IT should bring about scalable efficiency, where the scale of operations can be increased at little cost. Advanced data analytics can lead to streamlined decision making, while automation holds great promise for processing tasks. As a result, staffing could be trimmed. Automakers typically spend more than 40 euros "cost to serve" for each online service interaction with a client. They should be able to reduce this to fewer than 12 euros – something other industries have achieved.

The auto industry is constrained by its costly legacy IT systems, which are needed to run current operations yet leave little budget to invest in new IT infrastructure. Typically, the ratio of spending on running IT to that of changing IT is around 80 to 20. We think automakers should push this to more like 40 to 60, shifting the IT budget away from running current systems towards investment in new solutions and applications.

A separate, greenfield IT platform is one way to let new IT capabilities evolve without the constraints of the legacy system. It would feature a simpler decision-making process, with less consultation and sign-off and more room for experimentation and failure. Cloud and server-less systems would reduce costs, allow access to the latest technology, and free up resources for implementing change. The new digital tools – such as customer services – will run on this greenfield platform from the start. Additional functionalities from the legacy applications will be developed incrementally in the new platform or transferred when it is ready to take them over.

THE SKILLS TO DO ALL THIS

Making these changes will reduce workforce needs, particularly in data processing. At the same time, new expertise in data analytics and digital project management will be needed to execute the digital transformation. Automakers will also need to change their organizations to work in new, more-agile ways, which place a premium on relationship building and problem solving.

To cope with this shift, traditional workforce planning should be replaced by a more dynamic approach. Automakers will need a talent ecosystem to provide access to the new skillsets from multiple talent pools.

This will be a challenge, particularly as digital talent tends not to be less attracted to traditional manufacturing. New models for IT careers and talent development in manufacturing will be needed, as will a new learning culture. Digital talent needs to be persuaded that the work will focus on attractive, next-generation products and applications – developed in agile, cross-functional teams – and not just back-office systems.

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