

White Paper:
AUTOMOTIVE AND TRANSPORTATION

DRIVING CHANGE IN THE
DEALER IT ENVIRONMENT



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EXECUTIVE SUMMARY

In today's automotive industry, vehicle manufacturers must continually identify new opportunities for efficiency improvement and cost takeout to maintain their competitive advantages. Currently, some manufacturers seek to extend the makeup of the enterprise so that they can share information and applications with dealers in real time as well as provide new products and services electronically. By making innovative connections with dealers, they expect to achieve more accurate planning, faster responses to market shifts, significant cost savings and increased sales. To realize these benefits, however, vehicle manufacturers first need to develop strategies for addressing the challenges posed by the dealer service/systems providers (DSPs) that control today's dealer information technology (IT) environment.

In the following discussion, we provide vehicle manufacturers with insights that they can leverage to begin addressing these challenges. We begin with an overview of the systems that dealers use for everyday operations, describing both the need for integration and the market dynamics that make this integration difficult to achieve. Next, we discuss the important role played by DSPs in today's dealer IT environment and offer specific information about the DSP business model. Finally, we outline potential strategies that vehicle manufacturers can use to collaborate with or work around DSPs in leveraging new technologies and building more productive relationships with automotive dealers.

SEAMLESS INTEGRATION: LINKING VEHICLE MANUFACTURERS WITH DEALER COMMUNITIES

A few well-established DSPs currently supply the majority of automotive dealers with turnkey IT systems—along with the associated services and support—that have become essential to effective day-to-day business operations. Known as dealer management systems, these systems enable the efficient performance of back- and front-office tasks such as inventory management, sales and service management, financing, accounting and human resources management. See Figure 1.

FIGURE 1.
COMPONENTS OF A DEALER MANAGEMENT SYSTEM

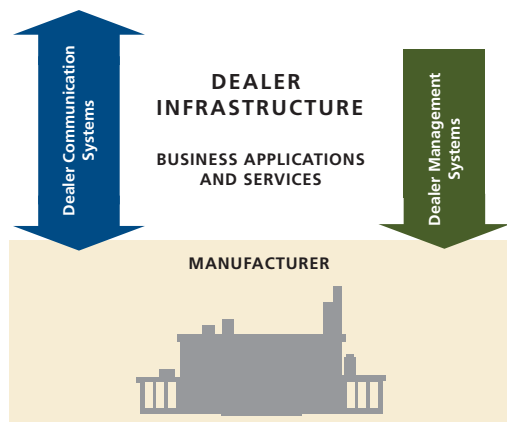


In addition to purchasing dealer management systems, dealers must pay the cost of operating and maintaining dealer communication systems, which are the sophisticated applications that most vehicle manufacturers have already developed and deployed. These manufacturer-mandated systems support critical functions such as parts ordering and warranty claims processing and form an integral part of dealers' day-to-day operations.

As a result of all these components, dealers incur substantial costs in operating these systems. For example, dealer communication and management systems each require expensive in-dealer hardware to power the various functions. The IT cost to manage both systems can average approximately 0.6 percent of revenues for a typical dealer group or add approximately \$100 per vehicle.

From the perspective of vehicle manufacturers, however, the greatest challenge posed by DSPs is that an integration capability is not being built into the dealer management systems they provide. Because DSPs retain and attract dealer clients chiefly through cost-driven strategies that fail to reward innovation, they have little incentive to create a common data model across applications and order-management systems. As a result, external integration between dealer management and communication systems has become virtually impossible to achieve at a low cost. This situation, in turn, prevents vehicle manufacturers from realizing the full benefits of more effectively collaborating, exchanging information and sharing applications with their dealer communities. See Figure 2.

FIGURE 2.
INEFFICIENT BATCH METHOD OF DATA EXCHANGE



Most vehicle manufacturers have developed, for specific situations, strategies for coping with this lack of integration. However, continuous, seamless integration between dealer management systems and dealer communication systems has yet to be achieved. This situation results in process inefficiencies for dealers, DSPs and vehicle manufacturers alike and results in rising maintenance costs for dealers. It also leaves vehicle manufacturers without real-time views into their sales channels. In addition, dealers continue to struggle with the multiple entries required from dealer communication systems to dealer management systems. This challenge is particularly troublesome for multi-brand dealers that must enter the same information three or four times to support the manufacturer, the dealer and, in some cases, the dealer's parent business unit.

Automated processes, rapid transactions and tight integration between dealer communication and management systems will be achieved only if manufacturers adapt to or create change within the preexisting IT systems currently being supplied by DSPs. However, reforming today's dealer IT environment is a significant challenge. Although profit potential exists in the development of customized extended applications and increased collaboration with vehicle manufacturers, DSPs believe that these advances could cannibalize existing market share and open the door to greater manufacturer control and competition, thus undermining the viability of the DSP business model. Nonetheless, there are several strategies, discussed later, that vehicle manufacturers can pursue to address the challenges posed by DSPs.

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THE COST-DRIVEN DSP SUPPORT MODEL

Unlike organizations in most other industries, automotive dealers rely on very small internal IT staffs to run their businesses. Dealers require a different level and type of support that generally exceeds IT support provided in other industries. This results in comparatively high support costs, so dealers rely heavily on DSPs for their IT assistance. The majority of dealership IT support is centered on responding to user errors rather than to technical issues. Because dealer personnel typically are not savvy computer users, they often require a level of support higher than that required even by average computer users.

Dealership Environment

The demanding nature of the automotive retail environment requires rock-solid performance from supporting IT systems. If these mission-critical systems fail, every department of the dealership can be frozen in a profit-draining lockdown. Despite the relatively limited options available to dealers choosing a dealer management system, each dealer's IT implementation will be unique. For example, the dealer's IT system must be compatible with:

- The unique reporting and integration requirements of each vehicle manufacturer franchise with which the dealer is affiliated.
- Any multi-franchise business locations and reporting structures.
- Hosting as part of system architectures that can vary widely in age, capacity and load.
- Integration between each of the dealer's own business units/locations.
- Potentially numerous integration points with vehicle manufacturer and third-party applications.

Dealership Installation

The introduction of new software and solutions usually requires that DSP field-support staff visit the dealership to perform the installation. The installation can involve new hardware and a unique custom configuration required by the dealer's IT architecture as well as testing of the new product for compatibility and performance. In addition, varying amounts of training and instruction may be required. Also, due to the heavy demands of the dealer retail environment, new products often must be installed after business hours. All of these variables serve to drive up support costs.

Ongoing Support

The mission-criticality of automotive dealer IT means that DSPs must offer highly available support services. The ratio of support resources to customers is much lower, however, than would be the case with software support companies serving other industries—a situation that results in higher costs for both DSPs and their customers. The major DSPs have each introduced ASP-based solutions, but these solutions have not been widely adopted,

largely because they fail to significantly lower user-error support demands.

As in any modern IT support organization, there are multiple layers of support in dealer systems, ranging from user manuals and online documentation to phone staff and field staff. Increasingly, the major line of support for a dealer management system comprises remote, phone-based support professionals who can dial in to the dealer's system to diagnose and sometimes remotely fix software and configuration problems. Again, the majority of these calls typically concern user errors as opposed to technical ones.

One of the major trends driving the convergence of dealer communication and management systems is the use of Web-based applications to help reduce these on-site service fees. To this end, dealer-driven portals can remove expensive server hardware in the dealership. The dealer needs minimal hardware, such as personal PCs and a high-speed Internet connection, and all software can be centrally hosted and supported, which can greatly simplify maintenance and upgrade processes.

Economic Model

Given the shrinking population of the current base of 22,000 new-car dealers in the United States, the opportunity to spread out support costs is diminishing. Assuming that dealers mainly purchase additional applications from their DSPs, and factoring out smaller dealers, the expected market for a very successful dealer IT product is only about 5,000 units—a relatively small customer base across which to share research/development and support costs. Given the lengthy sales cycles for most products, DSPs often do not project returns until three to five years after introduction.

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DSPs allocate support resources based on the requirements they project for each product as it is introduced/upgraded. When support resources are stretched thin, customer satisfaction typically drops precipitously. To keep customers happy, DSPs may need to allocate large support resources to new products, thus driving early customer acceptance and satisfaction. As the product matures, support resources can ebb with demand to the point of diminishing returns (i.e., when additional resource investment would generate only minimal customer-satisfaction returns). Of course, due to the multi-tasking responsibilities of the support organization, this shift can be more of an accounting formality than an actual resource allocation; however, large support campaigns, such as new-product introductions, must be clearly tracked and accounted for.

The price point for support is based on the projected utilization of the support resource. A profit margin is built into the price, and expenses are factored into the business model of each DSP product set. As a rule, effective product strategy means keeping support costs to a minimum. The need for low support costs, however, can result in increased research and development resources being expended, which can drive up overall product costs. For example, extensive testing of unique dealer management system configurations will drive up

the research and development costs of the new product but ultimately lower support costs. The challenge for DSPs is to correctly project the point of diminishing returns.

Although support can constitute a manageable revenue center for DSPs, support-intensive products tend to create dissatisfied dealer customers. Consequently, a critical question for DSPs is this: How much are dealers willing to pay to avoid support-intensive products? The apparent answer, however, usually is “not enough to cover the eventual cost of support.” This situation, in turn, motivates DSPs to price support fees and software licensing separately.

Because dealers understand that software updates are needed to keep their systems compatible with vehicle manufacturer requirements, they perceive value in paying for software licensing, while seeing the need for support as a failure on the part of the DSP. Consequently, support fees tend to be low and licensing fees tend to be high. It is logical to assume that fees collected for software licensing often underwrite actual support costs—especially at the beginning of a product’s life cycle, when support expenses are at their peak.

Pricing Models

Pricing models are fairly consistent across DSPs, with fees divided between hardware and software. DSPs typically include fees in the following categories:

- One-time, up-front fees.
- Monthly software licensing fees (often categorized as “support fees” in other IT models).
- Monthly support fees.

Some products also include transaction-based pricing. In addition, there are other classes of fees tied to hardware and the number of users and locations.

While the use of monthly software licensing fees represents a break with IT industry norms, these fees do include, among other things, the research and development costs that result from the need to regularly update systems to meet vehicle manufacturer-specified reporting requirements. Figure 3 shows two examples of DSP product pricing structures.

FIGURE 3.
EXAMPLES OF DSP PRODUCT PRICING STRUCTURES

	UP-FRONT COSTS	MONTHLY SOFTWARE LICENSING	SOFTWARE SUPPORT (PER LOCATION)	TOTAL ANNUAL COST	SUPPORT-SPECIFIC PERCENTAGE	SUPPORT AND LICENSING PERCENTAGE
Accounting (General Ledger)	\$2,500	\$200	\$35	\$5,320	7.89%	53%
Parts Inventory	\$1,875	\$150	\$26	\$3,990	7.89%	53%

Assuming that dealers mainly purchase additional applications from their DSPs, and factoring out smaller dealers, the expected market for a very successful dealer IT product is only about 5,000 units—a relatively small customer base across which to share research/development and support costs.

Because other costs are small when compared with software licensing fees, the true cost of support can be estimated only when the licensing and support fees are aggregated and looked at as a percentage of the total cost. Of course, until an entirely new software upgrade and the associated up-front fees are required, the future dealer cost exclusively comprises support and licensing.

ADDRESSING THE CHALLENGES OF DSPs: SIX STRATEGIES FOR VEHICLE MANUFACTURERS

How can vehicle manufacturers work with DSPs to save money for their dealers and themselves? Which applications should manufacturers consider providing directly to their dealer communities? Which will yield the highest return on investment? Which are the easiest to implement? How can manufacturer products be launched to dealer communities in conjunction with DSPs to help ensure product acceptance and adoption?

The potential strategies, each with specific advantages and disadvantages, are outlined as follows:

1. Leverage the Internet.
2. Drive the change.

3. Define and execute a road map.
4. Drive standards.
5. Reengineer dealer communication systems.
6. Focus on revenue.

Strategy 1: Leverage the Internet

Vehicle manufacturers need to deliver information to dealers in the most cost-effective way, and this can efficiently be accomplished through the creation of a dealer portal that effectively bypasses the dealer management system. For instance, one manufacturer currently allows its dealers to order their own inventories online. The system tracks sales trends day by day and dealer by dealer to help assembly plants determine what to build and to advise the marketing department on what to promote and where.

By more tightly connecting dealers and manufacturers, portals can help manufacturers design, develop, plan, purchase, manufacture, distribute and sell vehicles based on real-time input rather than on traditional build-to-forecast models. Portals support the entire sales process—from making an offer, to finalizing the contract, to delivering the vehicle. They enable sales reps to configure and locate vehicles at the importer or wholesaler's

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site by deploying real-time data and powerful search criteria to find vehicles that match what a given customer wants.

In addition, customer service managers can handle maintenance and repair more efficiently by locating and ordering spare parts using a Web-based catalog. Because the portal seamlessly integrates independent online services, the manager can also order parts from third-party vendors.

PROS	CONS
<ul style="list-style-type: none"> • Real-time information • Benefit to both dealer and manufacturer 	<ul style="list-style-type: none"> • Would exclude the DSPs • Perceived loss of control by dealers

Strategy 2: Drive the Change

Vehicle manufacturers can drive change as long as the value proposition is balanced among all parties involved, as when the discontinuance of fiche and paper catalogs created a new market for electronic parts catalogs. With respect to electronic parts catalogs, the value lay in significantly lower costs of production, access to fresh information and the integration of solutions. In this model, the benefits are clear for all parties. In the case of DSP support, one mechanism would be to mandate the lowest level of connectivity from dealer to manufacturer.

PROS	CONS
<ul style="list-style-type: none"> • Common computing platform • Easier integration 	<ul style="list-style-type: none"> • Costs passed on to dealers • Single vehicle manufacturer cannot drive

Strategy 3: Define and Execute a Road Map

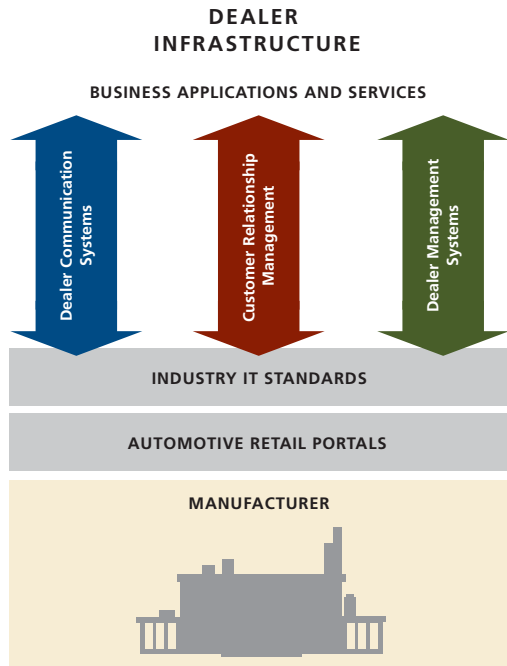
Many DSPs have resisted incursions by vehicle manufacturers into their market space. However, dealer-facing applications, “free” data and seamless integration could help DSPs remain successful. If vehicle manufacturers could define and execute systems road maps and bring the DSPs along in the process, it would be much easier for DSPs to plan for the new systems and connectivity. The potential downside for DSPs, however, is that barriers to marketplace entry could be lowered. From this perspective, platform complexity is a DSP ally in terms of maintaining market share and profit margins. To bring new applications and services to dealers, vehicle manufacturers will need to make firm commitments to follow through with their initiatives. The failure to do so would be seen by DSPs as a trust violation. See Figure 4 (page 9).

PROS	CONS
<ul style="list-style-type: none"> • Dependable view of the future • Reduced support costs 	<ul style="list-style-type: none"> • Could slow development of applications/services • Single vehicle manufacturer cannot drive

Strategy 4: Drive Standards

Many vehicle manufacturers belong to the dealer standards group (www.starstandard.org). This standards body has begun the process of establishing integration and connectivity standards for the automotive retail space. This organization will be needed to help bring the dealers, DSPs and vehicle manufacturers together for mutual benefit.

FIGURE 4.
NEW, DYNAMIC METHOD OF INFORMATION SHARING



In the past, manufacturers have taken a hands-off approach and have not provided strong support for standardization. On the other hand, DSPs have looked to the standards body only to protect market share. As vehicle manufacturers seek to extend the enterprise and cut costs, the challenge will be to create incentives for DSPs to begin assisting in the establishment and application of standards. How manufacturers will achieve this advance has yet to be demonstrated. The standards forum undoubtedly could be strengthened, but it will take aggressive leadership from vehicle manufacturers to ensure that the standards penetrate the marketplace.

PROS	CONS
<ul style="list-style-type: none"> Recognized source of standards Common forum for issues 	<ul style="list-style-type: none"> Does not have a history of action Single vehicle manufacturer

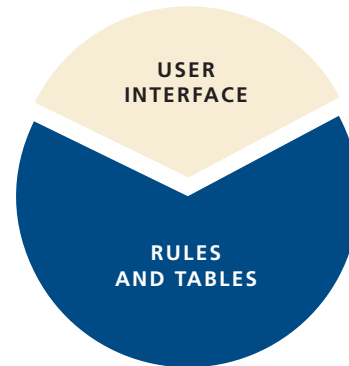
Strategy 5: Reengineer Dealer

Communication Systems

One of the main drawbacks of dealer communication systems is a design that causes DSPs to change their core systems for each vehicle manufacturer each time an associated application or integration point is changed. A different model would architect a thin client back-end that contains rules and tables and let the DSPs provide the user interface and back-end integration. This scenario is depicted in Figure 5.

PROS	CONS
<ul style="list-style-type: none"> Fast application and integration changes Costly on a one-time basis 	<ul style="list-style-type: none"> Could save support and ongoing charges Single vehicle manufacturer cannot drive

FIGURE 5.
REENGINEERED DEALER COMMUNICATION SYSTEM



Strategy 6: Focus on Revenue

A final strategy would focus on the revenue-sharing potential for DSPs and dealers, providing for the examination of end-to-end cost structures and revenue enhancers that could create win-win solutions rather than adversarial relationships. For example, an initiative to send service labor time guides directly to dealers from a vehicle manufacturer would directly affect DSPs' income streams.

However, the solution could incorporate a process that would broadcast the labor time guide master to the DSP location and provide change-only updates to dealers, resulting in cost savings for the vehicle manufacturer, the DSP and the dealer.

PROS	CONS
<ul style="list-style-type: none">• New view of the old world• Willing participants share revenue	<ul style="list-style-type: none">• Would take a dedicated sponsor to push• Raises trust issues

CONCLUSION: ESTABLISHING A CLEAR PATH OF VALUE

As manufacturers continue to look for cost-saving measures, dealers will also see benefits. Capital investment in the infrastructure of the current automotive retail environment will change as manufacturers look for ways to gain greater insight into customer demands. In the future, more of the assets and intellectual capital of the total enterprise will be dedicated to the multifaceted consumer interface and to interpreting customer requirements. This dynamic will drive a need for larger dealer networks and create new opportunities to pass on cost savings to customers and shareholders.

For vehicle manufacturers seeking to use new technologies to establish more productive relationships with dealers, a successful approach will be dealer-centric and provide a clear path of value to all stakeholders involved, including DSPs. Each of the strategies described earlier has merit on its own,

but a combination could prove to be the most effective approach. As was the case with the Internet car-selling model, change will occur and success will be achieved only with a balanced approach that creates a beneficial situation for dealers, DSPs and vehicle manufacturers alike.



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