

## Making the Case for IT Standards in Retail Automotive

## **A Historic Choice**

The automotive retail industry, with more than a century of innovation and improvement behind it, is now confronted with a historic choice about the way it serves customers and communicates with business partners. Dealers, manufacturers, lenders and all of the important vendors in the retail sector are being asked to voluntarily adopt a common set of communications and data exchange standards, a way of doing business that other major industries have been aggressively pursuing. What is the alternative? To do nothing, to continue with an Information Technology (IT) “crazy quilt” of incompatible dealer management systems, redundant factory communications links and applications that generate mountains of customer information that often reside in isolated and little-used databases.

Now, a discussion of computing standards may, at first blush, seem like a subject best handled by techies. But remember—common computing standards, like all business and technology standards, exist to speed the flow of business, improve customer service and drive revenues. Standards can be a business catalyst. They can tear down walls, knock over roadblocks and eliminate dead ends. Sometimes with dazzling results.

## **Hogsheads and HTML**

A little history:

- In the British colonies of North America, the weights and measures were, of course, English in origin. But there was no standard, no Bureau of Weights and Measures to enforce a uniform system. All of the following measures were in use, often in direct competition: the firkin, kilderkin, strike, hogshead, tierce, pipe, butt, and puncheon. A bushel of oats in Connecticut weighed 28 pounds, but in New Jersey it weighed 32 pounds.
- When British railroad engineers set to work on America’s rail system in the 19<sup>th</sup> Century, they used what had then become known as the standard gauge (4 feet, 8.5 inches). They wanted to avoid the problems that a competing “broad gauge” had caused earlier in England. Where the broad gauge and standard gauge met – before standardization — passengers and goods had to be unloaded from one train to another.
- In 1970, before many timber-carrying ships were containerized, it took 108 men about five days to unload a ship. With standardized containers, the same load of timber could be unloaded by eight men in one day.
- The phenomenal growth of the World Wide Web is due in large part to the adoption of HTML, a standardized method of displaying information in Web browsers. The Web is poised for another growth spurt with the adoption of XML, a related language that provides a standardized format for consistently recognizing the elements of business data as they are processed in applications or exchanged among different companies’ computer systems.

## **The Payoff for Automotive Retailers**

The computing and communications infrastructure of the automotive retail industry today is coping with some of the same problems faced by the British rail industry before standardization. How so? The data “pipelines” commonly used by retailers don’t meet, don’t link in a seamless fashion. Consider how data is handled today in a dealership. A report, a loan application, or a recall notice, is received in any number of ways: the U.S. mail, FedEx, the fax machine, by telephone, e-mail or Web page. The critical data is then manually transferred, or hand carried like railway luggage, to the proper destination. It is a slow, error-prone and wasteful process, one that vehicle buyers are increasingly less willing to tolerate.

The good news for automotive retailers is that help is on the way — *right now*. Manufacturers, dealers, their retail system providers and numerous vendors of parts and services are moving rapidly to an Internet-ready, standards-based computing world that promises to dramatically improve the vehicle buying experience for customers and dealers. Future applications are being built with technologies known commonly as Web services – tools that should be open, flexible and easy to use. You might call it the democratization of technology.

For the automotive retailer, the payoff will be huge:

- Reduced software, infrastructure and communication costs.
- Rapid implementation of new computer and communication applications.
- Less complexity and faster throughput for daily business transactions, including parts orders and credit applications.
- Seamless connectivity with retail industry partners and vendors.
- Real time access to business information and Internet customers.
- The flexibility to use a variety of computing platforms.
- Better use of existing dealership technology and business information.

## **A Home-Grown Revolution**

It’s important to understand that the movement to a flexible, Internet-based system based on common standards is not confined to the auto industry. In healthcare, for example, the new HIPPA (Health Insurance Portability and Accountability Act of 1996) regulations will dramatically reduce the “paper chase” surrounding patient visits by as much as 90 percent. That’s because new standards spell out common content and formats for exchanging patient records and insurance forms electronically. By automating the transactions, healthcare administrators hope to reduce manual errors and improve service.

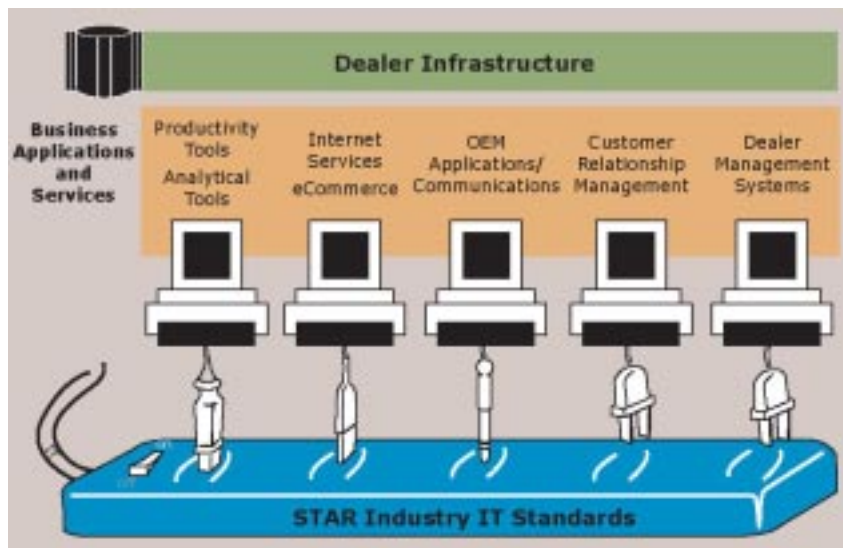
In the world of mass market retailing, errors and misinformation cost retailers and their consumer-goods vendors an estimated \$40 billion a year, says management consulting firm A.T. Kearney. Traditionally, error creeps in when retailers source information from catalog books, faxes and transcribe data from documents into a computer. The shift to standards for exchanging data also means freedom from proprietary networks, or company-owned links. The Internet becomes the medium – providing a reliable, scalable and low-cost solution. Who's going down this road? To cite one example, Wal-Mart Stores Inc., the \$218 billion a year powerhouse. Wal-Mart is moving its 10,000 suppliers away from expensive proprietary, point-to-point links and on to the Internet.

Might Web services be just another computer industry hype job, a la the late lamented Dot-Com bubble? A fair question, but there is a crucial difference. The adoption of the Internet and data standards in the auto industry is not being managed from Wall Street, Silicon Valley or some dot-commer's garage. This is a revolution by the auto industry, for the auto industry. Manufacturers, dealers, finance companies and IT vendors with roots in the automotive retail business are behind the push. These are companies that understand that any new computing and communications system must serve customers first, and in a way that *makes sense to the customer's use of technology*.

## **STAR Power**

In May 2001, a group of automotive industry companies formed the nucleus of STAR (Standards for Technology in Automotive Retail). STAR is a non-profit, industry-wide initiative to create voluntary IT standards to ease communications among manufacturers, dealers, and customers. You could think of STAR as a legislative body elected to draft the new standard data exchange formats. Who do the legislators represent? Members include the National Automobile Dealers Association, most of the dealer management system vendors, and 19 vehicle manufacturers.

STAR members are building and approving new data exchange formats for a variety of sales, service and finance applications: dealer financial statements, delivery reporting, repair orders, labor operations, warranty payment, sales leads – and many more. The standards are built in XML, the computer language of the Internet, making that information easy to identify and extract. Why is that important? Because Dealer A and Manufacturer B and Vendor C will all be able to exchange and obtain information from the same XML-based document, even though they might be using different computer systems. You could think of XML technology as a type of Esperanto, a universal language that creates the rules for a conversation where none could exist before.



The STAR group has adopted XML as its language, and now it's building a vocabulary that will allow automotive retailers to conduct business in a standard fashion. In each important area of the business, STAR will build enough XML "documents" to handle common transactions between dealers and manufacturers. This may involve hundreds of new XML formats. To date, 22 have been approved by STAR.

Here is a list of the current approved STAR BODs:

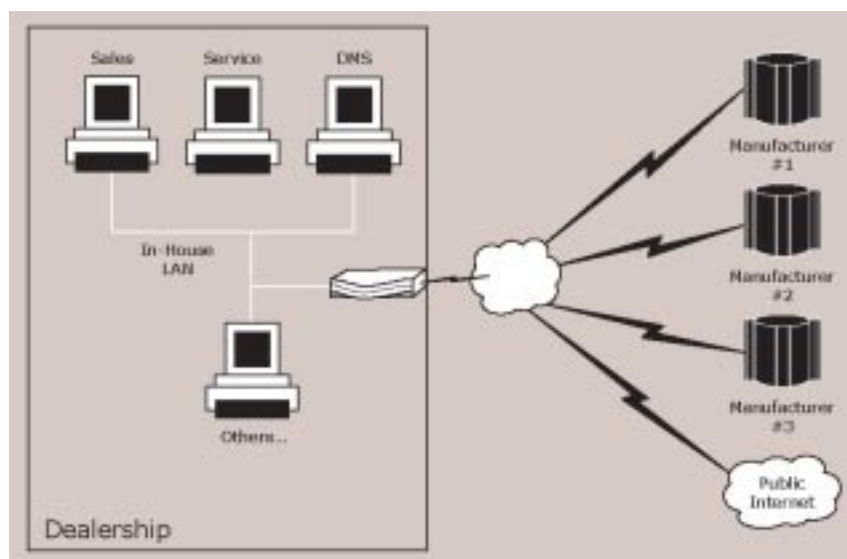
1. Credit Application
2. Credit Contract
3. Credit Contract Response
4. Credit Decision
5. Financial Statement
6. Labor Operations
7. Model Codes
8. Parts Invoice
9. Parts Locator
10. Parts Order
11. Parts Pick List
12. Parts Return
13. Parts Shipment
14. Repair Order
15. Retail Delivery Reporting
16. Sales Lead
17. Service Advisory Receipt Acknowledgment
18. Service Appointment
19. Service Processing Advisory
20. Vehicle Inventory
21. Vehicle Invoice
22. Vehicle Service History

Standardization is an enabler that greases the gears of business. Look, for example, at the de facto standard created by Microsoft with its Office suite of programs: Word, Excel, PowerPoint, Outlook and Access. By some estimates, the market share for Office reaches upward of 90 percent. Or, consider the Adobe Acrobat format for viewing documents and reports. When a .pdf file drops into your electronic mailbox, you simply click the attachment and open. Everyone expects you to use the Adobe format, and if you don't have it, it's available for free.

Having standard data formats are clearly advantageous. But without an efficient pipeline to transmit the standardized data, you just have a powerful sports car stalled in traffic. To get that sports car up to speed, you need an open road.

## Olympian Heights

In October 2000, General Motors, Ford and DaimlerChrysler released the Olympus document, referred to as the dealership infrastructure guidelines. This document describes the manufacturers' vision of leveraging the Internet to exchange information. They pointed out that not only are consumers increasing their use of the Internet (especially e-mail) but so are banks, auction companies, license bureaus and other non-OEM companies. In fact, the openness of the Internet could lead to more competition among companies vying for the dealer's business.



The infrastructure document provides technical guidelines for a system that manufacturers would like to see at the dealer level. In general terms, this IT infrastructure includes a local area network, personal computers with the capability to run OEM applications, and a persistent, reliable, high-speed connection between the local area network (which resides inside the walls of the dealership) and the Internet. As with most huge transformations, the actual

changeover is likely to be accomplished in steps. Even after the dealer has upgraded, the retail store may need to keep a satellite link or a leased phone line in place for the near term. But, eventually, it all moves to the Internet.

## **Fast Track Credit**

Where are we likely to see some of the first real-world uses of Web-based standards? Manufacturers are already putting the first applications into the field. In the world of vehicle finance, a new venture jointly owned by GM, Ford, DaimlerChrysler and Toyota is preparing to implement STAR standards to simplify the credit application process. Known as RouteOne, the Southfield, Mich.-based company seeks to dramatically reduce the time it takes for a credit approval and eliminate errors that creep into a process that uses a combination of phone, fax and manual data entry of computer forms.

Currently, franchised dealers are served by the captive finance companies. But when they cast their net wider, to banks and other local lenders, they often must go outside the proprietary network. Credit application aggregators can expand the dealer's reach, but won't include all lenders. In addition, the rushed nature of many vehicle credit applications and the volume of information required can produce an error rate of 35-50 percent of submissions, notes RouteOne Chief Operations Officer Michael Webster. That's going to change.

"Our goal is to provide the dealer with a single point of entry, a single application," Webster says. "And the dealer gets to select who he wants to do business with."

Webster said RouteOne and STAR are working "hand in glove" toward the goal of expediting the credit application process. RouteOne will adopt the data exchange formats approved by STAR, thus allowing captives, banks and other lenders to use a uniform set of credit application documents. And because the forms are standardized, more lenders can – in theory – compete for the dealer's business. Private networks will give way to an open playing field.

RouteOne, which is scheduled to roll out its service in late 2003, hopes to reduce the average vehicle transaction time by taking a good chunk of the wait out of the process. That means more time to sell, and less time pushing paper. Webster estimates that a vehicle transaction now takes 3-4 hours, from test drive to delivery. "We believe we can cut that time by at least 25 percent," he says.



## What You Can Do

According to STAR, the benefits of standards based computing over the Internet will achieve the following goals:

- The establishment of a common data infrastructure between dealers and OEMs.
- The use of more real time transactions in daily business operations.
- Data that is more reliable, accurate and timely.
- A lower cost and less complex IT environment at the dealership.
- Multi franchise dealers could need just one Dealer Management System per dealership, not per franchise, saving significant costs annually. And, in the future, switching to new systems would be easier.
- New revenue opportunities could open up, such as remote diagnostics, additional vehicle accessories, and infotainment services.
- Dealers could improve data exchange with OEMs and communication with customers.

What can you do to make this vision, this historic call to action, a reality? Support the work of STAR. Encourage dealers, manufacturers and vendors to tear down the roadblocks to information exchange standards. Upgrade dealerships with needed local area networks and common Internet links. Open the road to higher levels of customer service and retail sales growth.

For more information, visit [www.starstandard.org](http://www.starstandard.org)





## Sidebar

### How Specs Live Forever

The US Standard railroad gauge (distance between the rails) is 4 feet, 8.5 inches. That's an exceedingly odd number. Why was that gauge used? Because that's the way they built them in England, and English expatriates built the US railroads.

Why did the English build them like that? Because the first rail lines were built by the same people who built the pre-railroad tramways, and that's the gauge they used. Why did "they" use that gauge then? Because the people who built the tramways used the same jigs and tools that they used for building wagons, which used that wheel spacing.

Okay. Why did the wagons use that odd wheel spacing? Well, if they tried to use any other spacing the wagons would break on some of the old, long-distance roads, because that's the spacing of the old wheel ruts. So who built these old rutted roads?

The first long distance roads in Europe were built by Imperial Rome for the benefit of their legions. The roads have been used ever since. And the ruts? Roman war chariots made the initial ruts, which everyone else had to match for fear of destroying their wagons. Since the chariots were made for Imperial Rome they were all alike in the matter of wheel spacing.

Thus we have the answer to the original questions. The United States standard rail gauge of 4 feet, 8.5 inches derives from the original specification for an Imperial Roman army war chariot. Specifications and bureaucracies live forever.

So, the next time you are handed a specification and wonder what horse came up with it, you may be exactly right. Because the Imperial Roman chariots were made to be just wide enough to accommodate the back-ends of two war horses.

