

**Enabling an Information-
On-Demand strategy for
the automotive aftermarket
industry with IBM WebSphere
Information Integration
Platform.**

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Executive summary

The extreme competitiveness and financial difficulties of the US domestic automotive OEM's and the suppliers who rely on their business are well documented. Some suppliers of original equipment parts are realizing they can offset the poor performance of their core automotive parts business by building a secondary, more profitable business around the sale of replacement parts to resellers like Carquest, Napa and many others.

As more automotive parts suppliers enter the growing market for aftermarket parts, the ability to integrate and synchronize detailed product and pricing information through the extended enterprise can result in millions of dollars in additional profit. In recognition of the growing cost of manual reconciliation of data records between aftermarket parts manufacturers and resellers, industry trade groups like the Automotive Aftermarket (AAIA) Industry Association and the Aftermarket Council on Electronic Commerce (ACEC) have developed and promoted standards for the exchange of information, (to the benefit of all). Pressure to comply with these standards is strong but seemingly so is the task of transforming terabytes of legacy information to be in compliance with these necessary standards.

An Information-On-Demand strategy based on IBM's Parts Management for the Automotive Aftermarket solution that features the IBM WebSphere® Information Integration Platform is the ideal approach for building an information integration platform that integrates and transforms any data and content to deliver information aftermarket parts manufacturers, distributors and resellers can trust.

This paper will review the current information integration needs of the automotive aftermarket industry and describe how an Information-On-Demand strategy featuring the IBM WebSphere Information Integration Platform can dramatically improve the operational efficiency of all parties in the automotive aftermarket parts business.

Automotive aftermarket: an opportunity for diversification

In the extremely competitive world of the automotive supplier, businesses are looking for ways to offset the low-margin or no-margin business of providing new vehicle parts to the automotive OEM's. Providing replacement parts for vehicles in the field through aftermarket parts reseller channels has emerged as an attractive alternative. In a report published in early 2006 called *The Service Revolution in Global Manufacturing*, Deloitte Consulting found that the average profitability of the aftermarket parts and services business is 75% higher than overall business unit profitability and accounts for about 46% of total profits generated.

Adding to the attraction of this emerging sector is the fact that the market is significantly under-exploited. According to the same Deloitte Consulting report, automotive original equipment manufacturers secure only 70% of their "captive" market (customers of new vehicles whose warranty has expired) for replacement parts. The non-captive market is exploited even less, with only 18.5% of original equipment manufacturers successfully selling aftermarket parts and services to customers who did not previously purchase one of their vehicles.

Not only is the automotive aftermarket parts and service business more profitable for the automotive suppliers, it's also growing at a rate up to 10 times faster than the sale of the same parts to OEM's for new vehicle production.

Furthermore, because of the need for a strong understanding of aftermarket parts and services, this business typically requires a higher percentage of local resources which makes it less susceptible to offshore competition, at least for the short term.

Despite the attractiveness of this growing industry, many new entrants struggle to reap the potential rewards. Insufficient investment in development of the aftermarket parts and service strategy and business design, ineffective operations planning and management and poor execution are three general challenges faced.

In a report published in early 2006 called The Service Revolution in Global Manufacturing, Deloitte Consulting found that aftermarket parts and service customers are likely to get exactly what they want, at the right time and place, less than 75% of the time...

One of the most significant factors why some companies struggle with operations planning and execution in the aftermarket parts business is poor access to accurate and reliable product and pricing information. Ensuring that automotive aftermarket parts and service manufacturers and resellers have access to a single representation of accurate product and pricing data on-demand by anyone within the aftermarket parts and service extended enterprise is a critical consideration for companies considering entry to this market and for those already in it but not satisfied with the efficiency of their operations.

The remainder of this paper is focused on this critical aspect of the aftermarket parts and service business.

Problem description

A study called The Cost of Unsynchronized Product and Pricing Data conducted in 2003 by the Automotive Aftermarket Industry Association, Profile Systems and the Aftermarket Council on Electronic Commerce, determined that discrepancies in product and pricing information between aftermarket parts manufacturers and aftermarket parts resellers results in a 1% profit loss for the manufacturers and .75% for resellers. According to the report, the primary cause of these cost overruns is a lack of data synchronization between resellers and manufacturers.

Poor data synchronization costs are typically manifested as:

- Excess Inventory Costs
- Order Processing Errors
- Invoice Adjustments
- Extended Billing Terms
- Product Returns

Research by Deloitte Consulting for the Global Service and Parts Management Benchmark Survey ranked “Inadequate/Inflexible Information Systems” and “Data Management Issues” 3rd and 6th respectively as barriers to aftermarket parts and service excellence.

Excess inventory costs

Without timely access to reliable and accurate information related to product demand, manufacturers will need to carry excess inventory to compensate for spikes in demand. In addition, if information is not detailed enough to provide product demand data for specific geographical locations, excessive shuttling of parts between distribution centers may be required. There are costs associated with each of these scenarios that could be avoided if more accurate, detailed and timely information was available.

In the Deloitte Consulting report, research showed that the average forecast accuracy for aftermarket parts demand is less than 80% and for many companies it is much lower than that. Furthermore, almost 70% of the respondents to Deloitte’s survey admitted that they were unable to report on the forecast accuracy.

Order processing errors

When product information at the manufacturing site does not match that of the reseller, time and resources are required to reconcile the information. This added cost drags down the profitability of the transaction and delays getting products to the customer.

Invoice adjustments

Discrepancies in data between the reseller and the manufacturer require time and resources to reconcile and result in adjustments and re-invoicing before payment can be received by the manufacturer.

Extended billing terms

As a result of delays in resolving invoicing issues due to data discrepancies between the reseller and manufacturer, manufacturers are often forced to extend less-than-desirable billing terms.

Product returns

Incorrect product information that results in the reseller or customer receiving the wrong part causes extensive delays in delivery of the right product, costly shipping charges and customer satisfaction issues.

Common root causes of these excess costs include:

- Inaccurate Product and Pricing Data
- Long Lead Times to Deliver Products to the Customer
- Transforming Legacy Data to Comply with Standards
- Difficulty in Measuring Performance

Inaccurate product and pricing data

Inaccurate product data can lead to customers receiving the wrong parts, missing parts in an assembly or components not fitting the application for which they were sold. In any case, the end result is likely to be a returned product and dissatisfied customer and reseller.

When pricing data is inaccurate it inevitably leads to loss of control over costs and makes forecasting financial data very difficult. Even if pricing data is accurate, an inability to respond to pricing changes in a timely manner can have the same impact.

When aftermarket parts manufacturers and the resellers who are their customers disagree on purchase orders and invoices, product and pricing information are typically reconciled manually. The same is true when part numbers do not match UPC codes at their distributors. In addition to the added time spent reconciling the records manually, this introduces the problem of potentially creating duplicate master records of the data or overwriting correct master data with incorrect data.

Long lead times to deliver products to the customer

Delays by manufacturers delivering aftermarket parts to the end customer potentially result in lost sales revenue, frustrated customers and inevitably invite competition from other manufacturers with better control over information related to product demand and distribution. Timely, accurate information about the demand for products and the distribution of the right products to the right customers / resellers is critical to maximizing sales revenue.

Compliance to standards

The problems described above have led to the push for standards related to exchanging information between aftermarket parts resellers and manufacturers. Organizations like the Automotive Aftermarket Industry Association (AAIA) and the Aftermarket Council on Electronic Commerce (ACEC) have led the charge in the definition and adoption of standards like ACES - AAIA Catalog Enhanced Standard (catalog and vehicle applications data exchange), iSHOP (exchange of information related to vehicle service and diagnostics), PIES - Product Information Exchange Standard (exchange of product information like product dimensions, barcodes, warranty information, etc..) as well as numerous EDI standards related to the exchange of invoice, PO and shipping information.

These standards will inevitably have a positive impact on the ability to synchronize data between aftermarket resellers and manufacturers. However, currently most of this data is stored in data warehouses and applications that may not comply with the new standards. How to transform this legacy data to be compliant with the new standards presents a significant challenge.

Difficulty in measuring performance

In *The Cost of Unsynchronized Product and Pricing Data*, the AAIA cited a Northwood University DeVos Graduate School of Management recommendation to improve measures of performance. However, it is fairly easy to see that a prerequisite for measuring performance is trust in the integrity of the data being measured. This is true both in the establishment of baseline information and in the collection of new data to be measured against the baseline.

Integration of automotive aftermarket information

Integration of legacy systems within manufacturers and between manufacturers, distributors and resellers is critical to achieving the data synchronization vision. Unfortunately, data representing critical attributes like part number, UPC code and reseller pricing are often stored in different systems and different formats both within an organization, across similar organizations and through the distribution channels to the resellers. The PIES standard now provides an effective schema for the exchange of such

information but there remains the problem of ensuring compliance to the standard regardless of the original source of the data.

Historically, the approach to integrating disparate sources of product and pricing data was addressed through costly, inflexible, hand-coded, point-to-point solutions. Because these systems took so long to develop and the applications and related data models were dynamic, they were often obsolete by the time they reached production and then were slow to be adopted because they did not meet the current needs of the target user.

These point to point solutions were enhanced somewhat as standard data exchange formats like XML became mainstream. However, taking advantage of these neutral formats was only good if the legacy systems being used could export to this format.

Recent developments in the field of information integration provide the ability to remove the barriers preventing easy access to product and pricing information through the deployment of an *information integration platform*. An effective information integration platform consists of five fundamental capabilities.

1. The ability to connect to all relevant sources of information, whether structured or unstructured, mainframe or distributed, internal or external.
2. The ability to understand the content, quality and structure of the data sources prior to integration.
3. The ability to standardize and cleanse the data to provide a consistent view of any element of aftermarket product or pricing information.
4. The ability to effectively and efficiently collect, transform and enrich high volumes of data from source to target in a timely manner.
5. The ability to federate information enabling applications to access and integrate diverse data and content as if it were a single source without actually moving or copying the source data.

When properly deployed, an information integration platform is much more effective and scalable than custom developed, hand-coded integrations.

Integrated automotive aftermarket data with IBM Information-On-Demand

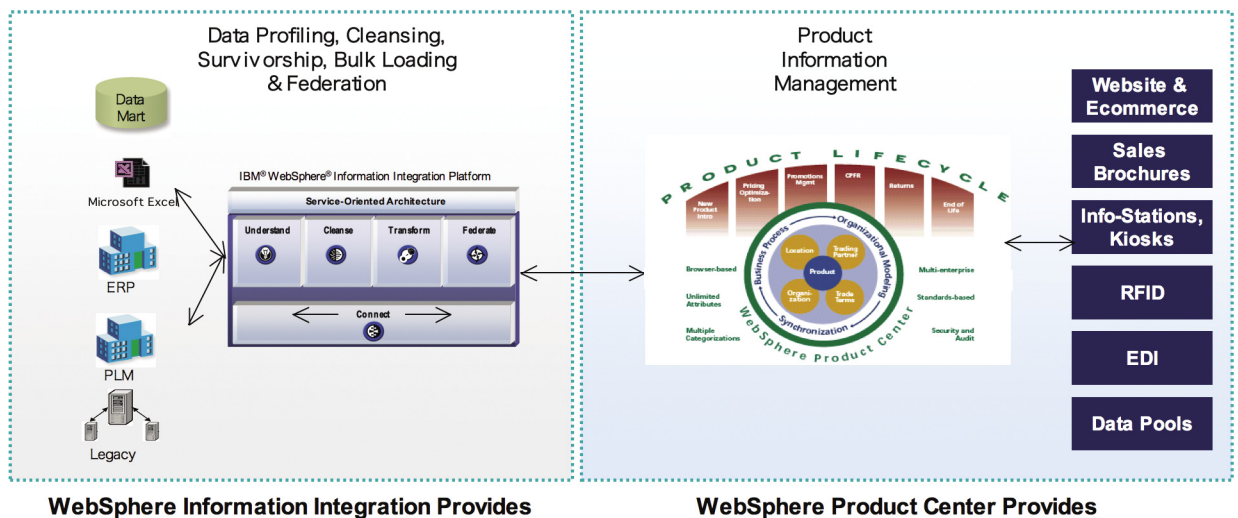
IBM offers a unique portfolio of solutions to help overcome the challenges of data integration and enable the delivery of information on demand. An Information-On-Demand approach enables companies to get the right information to the right people or processes at the right time to address the most critical business issues. With Information-On-Demand, aftermarket manufacturers, distributors and resellers can create business value and reduce risk by integrating, analyzing and optimizing all types of information throughout its lifecycle. Information-On-Demand is an effective means of achieving what the Automotive Aftermarket Industry Association describes as data synchronization.

More than just enabling data synchronization is the possibility of putting in place an information architecture that addresses many project requirements and leveraging that architecture across future IT initiatives. For example:

- Information-On-Demand allows executives, employees (people) and aftermarket parts manufacturing, distributing and reselling operations (processes) to have ready access to one consistent source of customer information to enable better customer service and CRM initiatives.
- IT organizations can consolidate various legacy historical and transactional environments to lower costs.
- Manufacturers can synchronize their product and pricing information across internal organizations, ensuring the shortest possible timetable for delivering new products to market. By providing a cost effective means of complying with standards like PIES, synchronization of product and pricing information can be extended through the distribution network to the resellers eliminating costly manual reconciliation of data. By compiling accurate, up-to-date information, aftermarket parts manufacturers and resellers can begin to capture some of the 1.75% of lost profits identified by the AAIA.

Enabling an Information-On-Demand strategy for the automotive aftermarket industry with IBM WebSphere Information Integration Platform.

IBM's Parts Management for the Automotive Aftermarket solution consists of solutions from the IBM WebSphere software product line. The solution contains two major components; WebSphere Product Center and WebSphere Information Integration Platform. The WebSphere Information Integration Platform ensures the quality and reliability of the information being presented to the end-users via WebSphere Product Center. WebSphere Product Center provides functionality to leverage rich information provided by the WebSphere Information Integration Platform across internal and external customer touch points including web sites, e-commerce store fronts, kiosks, B2B catalogues, printed sales material such as seasonal/annual catalogues, product data sheets etc.



The IBM WebSphere Information Integration Platform provides access to the broadest range of information sources and the most flexibility in how these functions are used, including support for service oriented architectures, event-driven processing, scheduled batch processing and standard APIs like SQL and Java.

The Automotive Aftermarket Industry Association July 2003 study called The Cost of Unsynchronized Product and Pricing Data analyzed over 14,000 aftermarket parts resellers records and found that:

- 11 percent part number mismatch
- 34 percent mismatch on native part number
- 45 percent matched on all key fields, when matching techniques were applied
- 4 percent mismatch on price
- 5 percent minimum order quantity differences

The IBM WebSphere Information Integration Platform solves problems related to data profiling, data quality, and data transformation and distribution throughout the organization. It is designed to churn through mountains of financial, customer, product and reference data and enables you to:

- Understand the structure and quality of aftermarket parts product and pricing data.
- Cleanse customer service data for a unified view of the customer
- Transform legacy information and federate it into a virtual whole.

The following sections will explain how the WebSphere Information Integration platform helps consolidate information from multiple sources to develop a single source of trusted information.

Understand the structure and quality of aftermarket data

Whether consolidating aftermarket part description data or preparing data for PIES compliance operations, the first task is to understand the environment you are working with by investigating and discovering the sources of the data. For example, you may have five different source systems which you want to integrate into one data warehouse. Each of these source systems may be used by a different line of business or siloed division with different use-case scenarios for the data. To avoid combining incompatible and corrupt data which could cripple the integration effort, it is important to first understand the data's structure and quality.

IBM WebSphere ProfileStage™ automates the process of investigating source systems. For example, when consolidating systems, WebSphere ProfileStage provides a window into the different data sources, and enables you to view discrepancies or receive a report on the configuration of data so that you can identify incompatibilities among the different source systems. Data profiling with WebSphere ProfileStage also identifies data that looks suspicious. For instance, you can identify misuses of data fields, such as text strings in a field that should contain only numeric values, or customer comments in an address field. WebSphere ProfileStage additionally uncovers the underlying – and frequently undocumented – business rules used to produce the data.

Case Study

A leading manufacturer of heavy equipment has a massive supply chain. Consequently it's no easy task to ensure the integration of dealers, key suppliers, inventory, orders and shipment data. Recognizing that its lack of an enterprise-standard solution for data integration within its supply chain kept it from pursuing key business initiatives in sales and procurement, they began looking for an enterprise-standard solution for data integration.

The solution was to create a holistic solution using IBM WebSphere DataStage® Enterprise Edition, WebSphere QualityStage and WebSphere ProfileStage software. The manufacturer deployed WebSphere QualityStage to standardize vendor information and to create a single view of vendors for global procurement projects and WebSphere ProfileStage to analyze data sources and to provide quick data reporting and easy data validation.

Using integrated data about the customer base, potential buying population and past purchase data for each dealer's market, their central marketing team can now give dealers better support and more complete marketing programs to drive market-level promotions.

Some organizations attempt to do this manually or by looking at the documentation created when the source system was developed. Neither of these is a satisfactory method. Faced with profiling millions of records, the path of least resistance is to take small samples of records and make generalizations about the rest. A small sample of 50 or 100 records cannot adequately represent millions of records, so such conclusions leave errors in the data which can lead to cost overruns.

Alternatively, examining the documentation can lead to conclusions that are out of date. The documentation may have been written when the project was implemented and not updated while users were improvising with system features.

Manage business data definitions and lineage

Successfully leveraging an Information-On-Demand strategy in automotive aftermarket depends upon turning data into actionable information. In order to unlock the business value of information, an organization (and its extended enterprise) must give business meaning to its data. The IBM WebSphere Information Integration platform also provides the ability to define and analyze information, including its meaning, relationships and lineage. By managing metadata, or the "data about data," it provides a means to assign business context to information assets. It aligns the goals of the aftermarket manufacturer, distributor and reseller by providing a shared meaning of data, and helps establish responsibility, accountability and traceability of data. The WebSphere Information Integration platform also enables the organization to track the lineage of information, informing users about the original source of data and describing what has been done to the data (for example, cleansing, transformation or aggregation) prior to being loaded into a target system. By understanding where data came from and what has been done to it, you can better determine if it can be trusted for use in the enterprise to meet business objectives.

Cleansing aftermarket data

To standardize, remove duplicates and correct data, the solution is IBM WebSphere QualityStage™. Used most frequently to cleanse customer data (creating a single domain of customer data that is consistent across all

sources throughout the enterprise) WebSphere QualityStage enables you to write rules to harmonize the information contained in multiple records. Using probabilities to determine the properties of a record that are most likely to be correct, WebSphere QualityStage provides a single authoritative format to help remove inaccuracies and assure information accuracy. Working with samples of data to start with to refine a rule set, you iteratively deploy the rule on larger sets and finally across millions of records. An example of how you cleanse the data is finding multiple records with slight variances of the same information (i.e., Wiper Blade - Rear, Rear Wiper Blade or RR Wpr), but the same vehicle application. The probability is very high in this instance that all these records are talking about the same part. You can then write rules to put the part name, vehicle application, supplier and cost, into the same format, resulting in a clean list with no duplicate records. This technology can be used to cleanse data records shared between an aftermarket parts manufacturer and a reseller. Other examples include the ability to reconcile previously agreed-to pricing records for a particular component and to ensure the same minimum order quantity is represented on both the manufacturer and reseller databases.

Transforming legacy aftermarket data

In order to integrate or consolidate source systems, you may move data physically from separate source systems, to a data warehouse for instance. IBM Information Integration solutions offer two products that answer this need: IBM WebSphere DataStage and IBM WebSphere Information Integrator. WebSphere DataStage transforms information to match the format of the target system to which it is moving data. WebSphere Information Integrator seamlessly accesses data from any information repository to create virtual data stores.

Moving large volumes of relational data to a target system requires the performance and functionality of WebSphere DataStage. This scalable software utilizes parallel processing and fully exploits symmetric multiprocessing (SMP), massively parallel processing (MPP), clustering or grid computing platforms that can speed massive amounts of data to their destinations.

WebSphere DataStage can move data on a real-time basis from relational data stores to data warehouses to ensure that all information in the

target system(s) is up to date. This is especially important for customer-centric initiatives such as channel integrations such as those between an aftermarket parts manufacturer, distribution centers and resellers. Resellers want to be sure the parts they make available for resale fit their customers applications in the way they are described in the catalog and they want to ensure all agreed-to pricing and terms are accurately represented in the data from the manufacturer.

While WebSphere DataStage enables you to move data in source systems to target systems, you may want to access data in place, thus creating a virtual data repository without actually moving data. In fact, this method may save you considerable time and cost and automatically keep data up to date.

IBM WebSphere Information Integrator gives companies real-time, integrated access to business information – structured and unstructured, mainframe and distributed, public and private – across and beyond the enterprise. It provides information integration middleware that offers a range of technologies – including federation, data placement (including replication and caching) and data event publishing – to meet varied integration requirements.

WebSphere Information Integrator facilitates access to any database within the enterprise, enabling you to define rules around the information in the source system you want to access. Federated access enables you to create virtual databases that can be used in the same ways as physical target systems – to drive applications that require a consistent and holistic view of master data. To access information on mainframe systems or capture the information as it is changing, the most efficient method involves using WebSphere Information Integrator Classic Edition with or without WebSphere Information Integrator for accessing data in multiplatform environments.

The difference between IBM Information Integration Solutions and other vendors' products which are limited to moving data – or extract, transform and load (ETL) operations – is that without cleansing, ETL alone can result in a brand new application that is working with unusable data. This can result in a considerable loss for your firm – of customer confidence as well as revenue and profit.

Case study

Overview

A leading Fortune 500 manufacturer of motorcycles has over 1000 dealers worldwide and nearly 700 active suppliers and has enjoyed unprecedented success, with 20 consecutive years of record revenues and earnings. Their current revenue consists of approximately 80% from new motorcycle sales with the remainder coming from the parts, accessories and general merchandise businesses.

Consistent growth expands business – and IT complexity

Up until 2002, growth was so strong, that they were constantly expanding manufacturing capacity to meet the unending demand. The only real measure they tracked was manufacturing yield – they knew that they could sell everything they built.

The demand for their products necessitated an increase in manufacturing capacity, and along with that increased capacity, the operational systems that manage it. As a result, they have grown to 22 manufacturing facilities, all with separate operational systems and very little information integration between them. Compounding this lack of integration was the more than 1000 dealers with limited access to corporate information. The variety and disparity of their operational systems began to limit their opportunities for optimization and improved efficiencies.

Need for improved operational efficiencies emerges

Realizing the need to streamline their organization, one of the primary focuses of their business has been on improving operational efficiency and effectiveness. In order to achieve this, they needed to provide more information to their management faster, particularly at their dealer locations.

The manufacturer needed to have a clear picture of what was actually happening in the business on a day-to-day basis and quickly realized they didn't have the data integration infrastructure in place to

enable that visibility. Some of the measures and results they were seeking included:

- Current promotion performance data versus historical performance to measure and improve promotion effectiveness
- External market and parts information combined with internal order forecasts and shipments to optimize inventory
- External supplier costs combined with internal product and parts costs to optimize pricing and sourcing
- Order demand insight and actual performance versus goals for major promotional events to improve dealer penetration

IT environment reaches its limitation

Most of the information that business users needed was locked away in a corporate data warehouse, but it was not available to operational personnel, particularly at the dealer-level and at field events. They needed to feed this information directly into the operational systems that were being used for sales tracking, order and inventory management, and supplier management. By doing so, these applications could use that information when they needed it, as decisions on ordering and replenishment were taking place. However, the operational applications and the EAI environment had no way to access this information. In addition, the batch cycles that fed the warehouse were already strained with the existing volumes.

SOA expands opportunity to unite the business – in real-time

In response to these shortcomings, the manufacturer implemented the IBM WebSphere Information Integration Platform with IBM WebSphere DataStage SOA Edition. Using IBM WebSphere DataStage SOA Edition, they were able to publish services around their data warehouse that allowed the valuable data within to be easily shared across the enterprise.

By decoupling the information from the operational silos and treating it as a service to the organization, the application integration teams could

easily tie that data directly into the applications and business process that needed to consume that data.

The use of the IBM WebSphere Information Integration Platform allowed them to improve the timeliness and accuracy of their data. By converting existing ETL logic into services that could be called throughout the day as transactions were occurring, they also have been able to implement data quality processes more up-front in the data integration process, dramatically improving the quality and accuracy of the data for the rest of the organization.

The benefit of deploying pervasive data quality services has had a measurable impact on their IT cost structure. They estimate \$400,000 in annual savings from a labor standpoint alone.

One of the primary ways their IT organization has been able to reduce costs has been the acceleration of re-use of their development efforts. By leveraging the WebSphere Information Integration Platform, they can now enforce standards more effectively, and better record and reuse best practices and design patterns. They can also measure the effectiveness of their efforts by tracking reuse and productivity across all integration projects.

Transformation into an On Demand Business

The manufacturer's move to a service-oriented-architecture and information delivery services have not only increased time-to-delivery for the applications teams, but also allowed them to link data warehouse web services into their dealer inventory management applications. For example, they are now able to link vehicle fitment information directly into their dealer order management system. Using this mechanism, dealers gain insight into the number of motorcycles there are in their region that fit a particular part, before they order it. They now make more accurate decisions on the types and quantities of parts to order, increasing inventory turn and enabling more responsive just-in-time inventory management.

Business benefits are real and measurable

The business impact that the IBM WebSphere Information Integration Platform had on the manufacturer has been very positive. They can now manage, measure and deliver information about many different aspects of operational efficiency internally while providing visibility to the dealers. Some examples of how this has made their operation more efficient include the following:

- Dealers have more insight into vehicle fitment and local demand potential when ordering parts & accessories
- The company can measure their margins on parts and analyze supplier and item cost and pricing performance
- Managers can measure category performance and dealer penetration in real-time at promotional events

In addition to the clear benefits to the business resulting from improved information availability, the manufacturer has measured strong IT efficiency gains. They have seen a steady and remarkable increase in their reuse of integration logic, due largely to the standardization of a services layer, and creation of an Integration Competency Center. They estimate that they saved over 5,000 staff days due to reuse across EAI and EDW environments – directly attributable to the IBM solutions. And the pervasiveness of data quality across their organization is estimated to save the company approximately \$400,000 annually in labor costs alone.

Managing adherence to automotive aftermarket standards

The topic of specific aftermarket industry standards like PIES developed by the AAIA and ACEC was discussed earlier in this document. A critical factor in compliance with these standards is the ease with which aftermarket manufacturers and resellers can transform their legacy product and pricing information into compliance with standards like PIES. IBM WebSphere Information Integration solutions provide the means by which organizations can profile, clean and transform their legacy data into compliance with aftermarket standards, regardless of the legacy application, hardware infrastructure or data format. Through implementation of these tools, aftermarket parts and resellers will have the foundation to ensure compliance to today's industry standards and the scalability to easily adapt to changes in the standards.

Conclusion

In summary, the aftermarket parts business is an attractive means for automotive suppliers to supplement the low-margin, ultra-competitive business of providing original equipment parts to automotive OEM's for use in new vehicles. Likewise, as more automotive suppliers enter the business of producing aftermarket parts, aftermarket parts resellers should benefit from the increase in the number of competing producers of aftermarket parts. However, as the industry grows in both volume and complexity, so will the need for accurate, timely information by all parties involved in producing and reselling automotive parts for the aftermarket. Effectively deploying an information integration infrastructure based on the IBM WebSphere Information Integration Platform is an important component of an automotive aftermarket parts business strategy.

For more information on the IBM WebSphere Information Integration Platform, visit www-306.ibm.com/software/data/integration.



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