

e-Commerce in the Canadian Automotive Aftermarket



A Report Prepared for:



January 2003





This report was prepared for the Automotive Industries Association of Canada (AIA) by DesRosiers Automotive Consultants.

Disclaimer:

The views expressed in this report are those of the consultant, DesRosiers Automotive Consultants, based on secondary research and consultations with industry representatives.

Acknowledgements:

AIA would like to acknowledge the financial contributions of Industry Canada, without whom this report could not have been made possible.



AIA would also like to thank members of its Information Technology Committee for their input into this e-commerce in the Canadian Automotive Aftermarket project; as well as survey participants and members of the focus group.

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January 2003.

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EXECUTIVE SUMMARY

- The current state of play of e-commerce in the Canadian automotive aftermarket is linked very closely to the past. Experiences of the last three to five years have had a significant impact on the way that companies within the Canadian automotive aftermarket use and perceive e-commerce within their business.
- Proprietary Electronic Data Interchange (EDI) systems located in the upper levels of the aftermarket supply chain continue to make up the largest portion of the aftermarket business-to-business (B2B) e-commerce environment.
- Giant steps made through the introduction of EDI and bar coding have perhaps played a role in holding back the expansion of e-commerce in the Canadian automotive aftermarket. Companies, while understanding the benefits of e-commerce, are generally hesitant to remove existing systems that work, especially when significant financial investments were recently made to make many of these 'legacy' systems Y2K compliant.
- A rationalization of expectations for e-commerce has occurred in the Canadian automotive aftermarket. Based on the original expectations of many, e-commerce over promised and under delivered.
- To date, simple, focused, and well-planned e-commerce ventures have been relatively successful in the automotive aftermarket.
- B2B e-commerce is better established in the higher levels of the aftermarket supply chain with many initiatives having been launched at the top of the channel by Warehouse Distributors (WDs).
- Business-to-consumer (B2C) e-commerce activity in Canada is still in its early stages. While a number of players have emerged within the Canadian market, B2C e-commerce in Canada has not yet reached the levels achieved in the United States.
- With a knowledge base now established, potential e-commerce players in the Canadian automotive aftermarket have a lot more data, information and experience to analyse when proposing a new e-commerce venture.
- Interviews and discussion groups held with various players in the Canadian automotive aftermarket clearly indicated that the concept of linking the aftermarket supply chain through e-commerce is a sound one and should be pursued.

- Interview and focus group discussions indicated that lack of participation among installers could be a barrier to achieving e-commerce goals within the aftermarket.
- Increasing installer participation will require identifying, and relaying, an e-commerce value proposition to installers.
- A potential roadblock that may prevent the Canadian automotive aftermarket from reaching its future e-commerce goals is the current lack of a comprehensive e-commerce strategy that is embraced by the entire industry.
- A reoccurring theme is the need for a focus on productivity and efficiency when developing an e-commerce strategy for the Canadian automotive aftermarket.
- As part of an industry e-commerce strategy, the cost of technology, obsolescence issues, human resources and training should be addressed so that each potential cost objection can be answered with clear benefits.
- New tools and applications, such as Extensible Markup Language (XML) technology, integrated shop (iSHOP) standards and vehicle identification number (VIN) decoding, could play a significant role in enhancing e-commerce in the automotive aftermarket by contributing to increased productivity, efficiency, and customer satisfaction.
- There is a clear indication from interview and focus group participants that the Automotive Industries Association of Canada (AIA) could play a leadership role by continuing to provide guidance to the industry on e-commerce related issues. AIA could also become the lead coordinator in the development of a formal e-commerce strategy for the Canadian automotive aftermarket.
- Partnerships and cooperation with installers in the development of an e-commerce strategy will be key to the success of any plan.
- It is the opinion of interview and focus group participants that the development of a formal e-commerce strategy for the Canadian automotive aftermarket should begin sooner rather than later.
- The habits and expectations of future automotive aftermarket service parts customers, especially young consumers currently in the 14 – 20 age group appear to be of great interest to the industry. As vehicles become more complex, there is also the question of whether this younger generation will actively participate in a future do-it-yourself (DIY) market?

- Suggested recommendations for the development of an e-commerce strategy in the automotive aftermarket include:
 - Identification of key players and required roles in the development of an e-commerce strategy.
 - Roundtable discussion(s) with leaders from each of the aftermarket sub-sectors to review issues and ascertain the potential for cooperation in developing and implementing an industry-wide e-commerce strategy.
 - Developing partnerships with regional, national and North American groups that can facilitate the development and implementation of an e-commerce strategy.
 - Inclusion of e-commerce issues at national or regional events. This may include keynote speakers, seminars, training workshops or displays.
 - Continued participation in groups such as the Aftermarket Council on Electronic Commerce (ACEC).
 - Provision of market research on issues relevant to an e-commerce strategy.
 - Dissemination of information on e-commerce through such vehicles as the AIA website, e-newsletter and AIA magazine.
 - Development of an IT (information technology) Forum tailored to the Canadian aftermarket, or participation in the current U.S based automotive IT forum to expand the content and attendance to include Canada.
 - Discussions with Industry Canada and Human Resources Development Canada (HRDC) to determine where the federal government currently has programs that encourage e-commerce initiatives and to identify further areas of cooperation.
 - Creation of a resource page on the AIA website to direct members to relevant sources of information.
- The speed of development that is occurring in e-commerce technology makes time a critical factor in developing and implementing an e-commerce strategy for the Canadian automotive aftermarket. The longer a strategy is delayed the wider the gap that the aftermarket will have to bridge to reach the levels of other industries.
- Through the development of this research study, it has become quite apparent that there are many individuals and organizations with the knowledge, drive, and willingness to move forward with an e-commerce strategy. Capitalizing on these very positive industry attributes will lead to success.

1. STUDY GOALS AND SCOPE

The extent of e-business adoption in the Canadian automotive aftermarket industry remains unclear. Member surveys conducted by the Automotive Industries Association of Canada (AIA) indicate that businesses still need help with B2B and B2C strategies, with some even lacking the infrastructure to participate in e-business. While the AIA's 2001 Outlook Study revealed a higher level of e-business integration among larger companies at the top of the supply chain, further down the distribution channel smaller wholesalers and installers appeared to have made little progress. For the industry to improve its connectivity as a whole, a better understanding is needed of the e-business state of play along the entire aftermarket supply chain.

A full consideration of the future for e-business in the Canadian automotive aftermarket would entail a variety of areas of investigation. This project was conducted as a first step in undertaking this exploration. In particular the goals of this study were to:

- Develop an understanding of the current state of play of the industry on this issue – to what extent has the industry-embraced e-business and where is it being used?
- Examine current practices to ascertain the industry's view of where it wants to go with regard to e-business and what its priorities will be in this area.
- Identify roadblocks and missing capabilities that will need to be addressed for increased e-commerce activity to occur.

For the purpose of this research study, e-commerce was defined as the development of a new business process or the replacement an existing process, using an electronic transaction. Electronic transactions, broadly defined, include:

- E-mail and electronic messaging
- Electronic invoicing and payment systems
- Internet and Intranet based web applications
- Electronic cataloguing, inventory control, estimating, and parts look-up
- On-line training
- The replacement of any other manual or paper based process with an electronic transaction
- Accessing Material Safety Data Sheets (MSDS)
- Processing DriveClean (Ontario) and AirCare (British Columbia) program information

To better understand the current landscape of e-commerce in the Canadian automotive aftermarket, personal interviews were conducted in August/September 2002 with key players in the aftermarket distribution channel. In September 2002, DesRosiers Automotive Consultants (DAC) hosted a focus group with the purpose of exploring the current state of e-commerce in the aftermarket, future goals, and potential roadblocks and barriers to success. The discussion guide for this focus group is included in the appendix.

This study also draws on secondary research sources, including studies carried out by the AIA and related e-commerce reports/documentation from around the world. While considerable care has been taken in the development of this report, it is emphasized that there is no definitive source of data on the structure of the e-commerce market in the Canadian automotive aftermarket. The information presented in this report is qualitative in nature, it represents DAC's interpretation of market parameters, and should be treated as such.

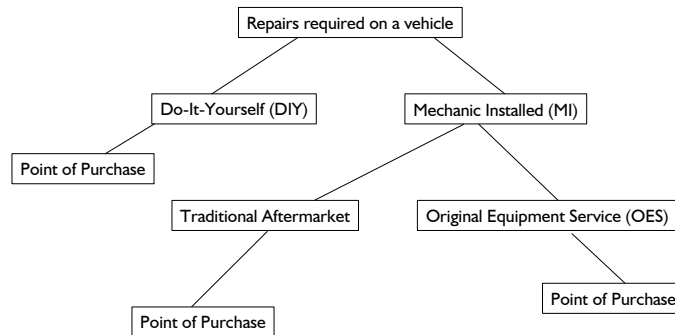
2. DEFINING THE AFTERMARKET¹

Before we begin to look at e-commerce in the automotive aftermarket, it is important to understand the composition of this sector of the economy and the business environment in which aftermarket companies operate.

The automotive aftermarket is that part of the automotive industry concerned with the manufacturing, re-manufacturing, distribution and retailing of all vehicle parts, tools, equipment, accessories, chemicals and services, except those products that are used as original equipment to manufacture new vehicles.

To get a better sense of the breadth of the aftermarket, it is useful to follow a typical consumer's decision-making tree. When a vehicle requires repair, the first decision a consumer must make is whether to do the work himself or herself, or to have someone else do it. The consumer who chooses to do the work, accesses the retail side of the aftermarket to purchase the required components. We consider this person a do-it-yourself (DIY) consumer or DIYer. If the consumer has someone do the work, he/she requires installed services from a professional installer and is referred to as a mechanic installed (MI) customer.

Decision Tree Model of an Owner for a Repair to be Done on a Vehicle

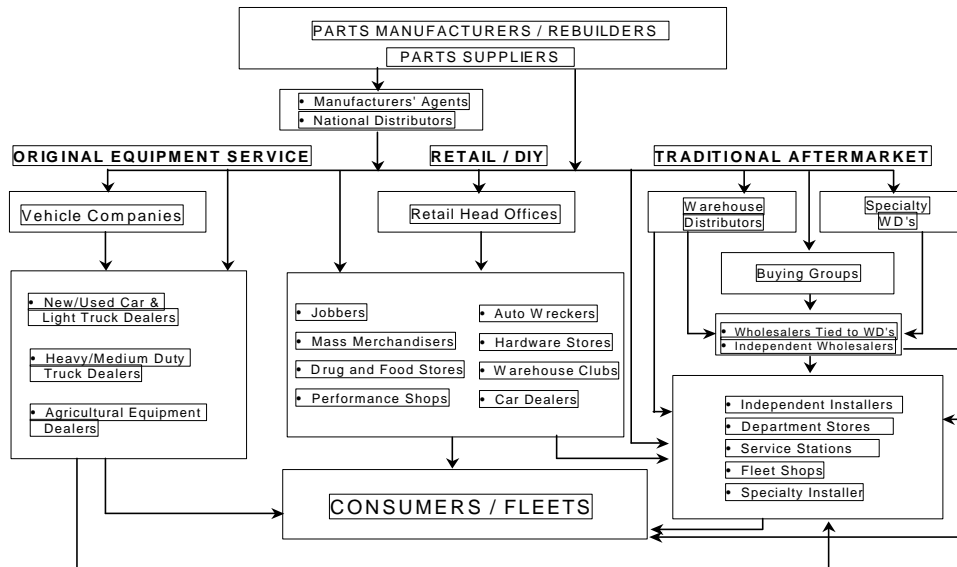


For MI customers, their second decision is whether to return to where they bought the vehicle (if purchased new), usually the car dealer, or to enter what is called the “traditional” aftermarket. If they return to the new car dealer, we call them an “Original Equipment Service” (OES) customer. If they go elsewhere, the consumer is referred to as a “traditional aftermarket” customer.

There can be considerable confusion about the definition of the aftermarket. In particular, many “traditional” aftermarket players do not include new car dealers into their definition of the total aftermarket, despite car dealers performing over 25 percent of installed work.

¹ The following section is taken from the 2001 Automotive Industries Association (AIA) Outlook Study.

In reality, the companies in all three channels, OES, Retail/DIY and “traditional” aftermarket are competing directly or indirectly for the consumer’s dollar.



Within these three channels there are a broad range of players who compete. Examples of typical players within each group include:

1. **Original Equipment Service (OES)**
(Usually includes parts & installation)
 - Vehicle Company Warehouses
 - New/Used Car and Light Truck Dealers
 - Heavy/Medium Duty Truck Dealers
 - Agricultural Equipment Dealers

2. **Retail/DIY**
(Occasionally includes installation)
 - Mass Merchandisers
 - Warehouse Clubs
 - Drug Stores
 - Jobbers (also known as wholesalers)/Auto Parts Stores
 - Hardware Stores

3. **Traditional Aftermarket**
(Usually includes parts & installation)
 - Traditional Warehouse Distributors
 - Specialty Warehouse Distributors
 - Buying Groups
 - Jobbers/wholesalers – independents and those tied to a banner

- Warehouse Clubs
- Service Stations
- Independent Repair Shops
- Specialty Repair Shops
- Bodyshops (an important additional example)

Divisions between the channels are not entirely clear-cut. Market competition has led to considerable overlap - some players compete within two or all three channels. Car dealers, for example, retail over-the-counter parts. Warehouse clubs install tires in some cases, while some wholesalers maintain service bays. Many independent body shops are essentially plugged into the OES channel, sourcing and installing OE-spec parts.

The automotive aftermarket comprises a complex network of companies organized to deliver the right part, accessory or chemical to the right place at the right time. Parts proliferation poses special challenges. Within the universe of Canada's 17 million registered light vehicles, for example, there are over 20,000 unique combinations of engines and body styles. If the level of analysis were raised to include transmissions, options, colours and trim packages, the number would be multiplied many times over. Several hundred thousand Stock Keeping Units (SKUs) may be required in order to cover each vehicle registered in a typical area.

Total direct employment in the aftermarket reached 225,000 in 2000 – the largest segment of the automotive industry as a whole. To put this in perspective, if the automotive aftermarket were considered a distinct industry, it would rank as one of the most significant employers in the Canadian economy.

2.1 CONSUMER USAGE OF E-COMMERCE / INTERNET

One of the first questions that comes up when researching e-commerce in the Canadian automotive aftermarket is why it should be of interest to the industry. The answer to that can be found in examining consumer behaviour with respect to the Internet and the extent to which Canadians have subscribed to it as a means of acquiring information, products and services.

Internet usage among Canadian consumers is continuing to grow. Canada ranks first in the world in Internet usage with 428.2 Internet users per 1,000, followed by Sweden (414.5/1000) and Finland (408.4/1000). The United States ranks number 4 for the number of Internet users per capita at 406.4 per 1,000 people, (*Internet Industry Almanac, 2001*).

For Canadian consumers, automotive-related Internet usage is more prevalent in vehicle retailing. While very few Canadians are interested in actually purchasing a vehicle on-line and having it delivered to their door, many Canadian consumers are using the Internet as a research tool. Based on the 2002 Canadian Automobile Association (CAA) Vehicle Ownership Survey, 21% of respondents had used the Internet in some capacity

during the acquisition of their current vehicle. In addition, 51% of respondents indicated they would use the Internet in some capacity during the purchase of their next vehicle. The same CAA Study indicates that consumers are most likely to use the Internet to acquire the following information:

- Look up / Compare pricing
- Look up / Compare vehicle reviews /evaluations
- Look up / Compare vehicle specifications / options
- Search for dealership locations
- Examine purchase / financing options

According to a December 2002 J.D. Power report “Dealers Struggle to Deal with the Internet”, new car dealers in the United States are embracing the Internet as never before. Statistics show that more dealers are getting connected to the Internet (90% have their own Web site) and more automotive consumers are turning to it for automotive shopping information, resulting in increased traffic to their Web sites. As the Internet becomes more prevalent and shoppers continue to purchase more commodities online, dealers are having to develop an Internet strategy and train their staff to respond to online shoppers.

Key factors for dealing with consumers on the Internet include:

- Simple web site design.
- Predicting what information the consumer will be searching for and making it easy to find.
- Current information / frequent updating.
- Security

The automotive aftermarket has not yet felt the same pressure from consumers. Although it would appear that consumer Internet usage is growing in certain areas of the automotive market such as vehicle retailing, it is not clear if this trend will spill over into the automotive aftermarket. Will consumers who used the Internet in some capacity to purchase their car be more inclined to want the same access when their car is in need of repair and service? In Canada, consumer options for using the Internet as a means of purchasing automotive aftermarket parts and service are currently limited. While a number of progressive independent installers may be using e-mail to arrange service appointments and communicate with clients, most consumer exposure to automotive aftermarket e-commerce has been limited to Internet web sites for niche parts, accessories, and tires. A more detailed discussion of business-to-consumer (B2C) e-commerce appears later in this report.

3. CURRENT STATE OF E-COMMERCE IN THE AFTERMARKET

3.1 CURRENT STATE OF PLAY

The current state of play of e-commerce in the Canadian automotive aftermarket is linked very closely to the past. Experiences of the last three to five years have had a significant impact on the way that companies within the Canadian automotive aftermarket use and perceive e-commerce within their business.

Beginning in the 1970's, larger players in the Canadian automotive aftermarket began adopting Electronic Data Interchange (EDI). Suited mainly to large companies, due to the cost of the technology, EDI allowed those who could afford it to begin reaping the benefits of increased productivity and efficiency through electronic business transactions. Proprietary EDI systems located in the upper levels of the aftermarket supply chain continue to make up the largest portion of the aftermarket B2B environment. EDI essentially has become the first generation of business-to-business e-commerce.

The introduction of EDI in the Canadian automotive aftermarket provided the opportunity for the industry to move and process tremendous amounts of data quickly and efficiently. However, it is the Universal Product Code (UPC), or bar coding, which has perhaps made the greatest contribution so far towards improving both productivity and efficiency in the aftermarket. Allowing for the quick and easy identification of hundreds of thousands of aftermarket parts SKUs, bar coding has removed one of the largest hurdles that prevented the industry from moving into an electronic era.

Giant steps made through the introduction of EDI and bar coding have perhaps played a role in slowing further expansion of e-commerce in the Canadian automotive aftermarket. Companies, while understanding the benefits of e-commerce, are generally hesitant to remove existing systems that work, especially when significant financial investments were recently made to make many of these 'legacy' systems Y2K compliant.

In the late 1990's explosive growth occurred in e-commerce plans throughout the Canadian automotive aftermarket. This desire by many to 'not miss the boat' resulted in several e-commerce systems not being adequately planned. As a result, e-commerce goals set 3-5 years ago in the automotive aftermarket were not always achieved. In addition, the failure of many upstart "dot-com" concerns in the late 1990's and 2000 have also contributed to an environment of caution concerning the mass proliferation of e-commerce throughout the automotive aftermarket.

As with any new technology, the enthusiasm of new users coupled with the enthusiasm of the people selling the new technology often overshadowed the solid planning that is needed to ensure the success of new systems. Many technology companies selling Internet-based e-commerce solutions in the late 1990's neglected to take into

consideration the high initial cost of EDI systems to their owners, and the fact that many were currently (and still are) functioning very well for their intended purpose.

Around the same time (in the late 1990's), vehicle manufacturers initiated a joint e-business venture called Covisint. Covisint was designed to be the leader in the automotive industry for sharing business process with suppliers and customers. The idea was that new levels of cooperation would result in the financial rewards of greater efficiency for each of the manufacturers involved. Covisint has had measured success in reducing procurement processing costs, however its full capabilities have not yet been completely explored.

There are however, a number of positive outcomes from this early experience. The initial forays into e-commerce have provided a knowledge base giving potential e-commerce players in the Canadian automotive aftermarket a lot more data, information and experience for analysis when proposing a new e-commerce venture. E-commerce experience in the automotive aftermarket and other industries have also provided valuable information on the habits and expectations of end-users and consumers when dealing with e-commerce applications.

As a result of past failures or goals not being reached, a rationalization of expectations for e-commerce has occurred in the Canadian automotive aftermarket. Based on initial expectations that were widely held, e-commerce was seen to have over promised and under delivered. Contrary to what was anticipated, the Internet has not replaced many EDI legacy systems that still exist in the higher levels of the automotive aftermarket supply chain. With lessons learned, the new approach to technology in general, and e-commerce in particular, is to ensure inclusion of any plan within the company's strategic planning process, which includes identifying the operational and dollar savings. This new business approach is more grounded and more likely to bring success than the initial "jump first, plan later" approach of the early 1990's.

The OE experience, i.e., Covisint, provides a model for any aftermarket buying group that might wish to develop a shared business environment using common tools and user interface. However, it should be noted that the size (number of SKUs) and scope (light vehicle, heavy duty, paint, body and equipment (PBE)) of the aftermarket would make this a far more complex venture.

With caution being noted, e-commerce is definitely a going concern within the Canadian automotive aftermarket. No matter where one looks within the aftermarket distribution chain, it is nearly impossible to identify a part of the chain that has not been touched by e-commerce. From electronic inventory systems at the manufacturing level to the ability of a consumer to pay an installer using a debit card, there is no doubt that e-commerce is an established presence within the aftermarket, and that it has the potential to grow.

3.2 HOW IS E-COMMERCE CURRENTLY BEING USED

As a result of the hurried and sometimes poorly planned implementation of certain e-commerce projects, there are now many polarized opinions regarding the value of e-commerce to the Canadian automotive aftermarket. Some players have gone cold to e-commerce because the expectations that they may have had were never realized. In other cases, players have enjoyed success in their e-commerce efforts and are enthusiastically moving forward with new plans and refinement. A consistent point of view within the automotive is that any e-commerce venture is now looked upon cautiously.

Despite the more guarded approach now being exhibited by the industry, e-commerce has been successfully integrated into many segments and business areas within the aftermarket parts distribution channel. Interview and focus group participants indicated several current uses of e-commerce in the automotive aftermarket such as e-mail, inventory control and e-catalogues.

E-commerce Utilization in the Canadian Automotive Aftermarket

	Manufacturers	WDs	Jobbers	Installers
E-mail	High	High	Medium	Medium
Inventory Control	High	High	High	Low
E-Catalogues	High	High	Medium	Low
Sales Reporting	High	High	Low	Low
E-Procurement	Medium	Medium	Low	Low
Marketing	Low	Medium	Low	Low
Training	Low	Low	Low	Low

E-commerce has logically been implemented in areas of the aftermarket where the greatest benefits could be achieved first. Communication, inventory control and cataloguing, all very process intensive areas of any business, have been significantly enhanced through the use of e-commerce.

E-mail, as mentioned by a number of study participants, has revolutionized the way that people work. In many instances, a large portion of communication previously accomplished through telephones and fax machines has been completely replaced by e-mail. E-mail is used extensively at the manufacturer and WD levels and is increasing among jobbers and installers.

Electronic inventory control systems are now used throughout the aftermarket supply chain. The ability to order, track and manage inventories leads to greater productivity and efficiency, reduced costs, and greater customer satisfaction with product being delivered in a timely manner. While many of these inventory control systems at the manufacturer and WD levels are based on EDI legacy systems, there is an expected movement towards Internet based systems in the future.

Cataloguing has always been a costly and resource consuming activity in the automotive aftermarket. The introduction of the standardized vehicle coding system by the Automotive Aftermarket Industry Association (AAIA) in the U.S. has aided by providing standard descriptions necessary to make electronic cataloguing possible. Electronic catalogues are much easier to produce, cost far less to distribute and are much easier to maintain and update. There are still, however, areas where improvements can be made. Electronic cataloguing will only be utilized if it saves the installer and jobber time. Currently installers have expressed concern that this is not the case. Improved graphics to identify parts and easier look-up are needed so the installer does not feel s/he is simply doing the same job as the counterperson. In addition, hard to find parts or inventory outside the normal stock of a buying group are still often accessed from paper catalogues. Availability of this data through electronic look-up methods would reduce look-up time, as the counterperson would have all information at his or her fingertips. In addition, better inventory control would be provided, as well as additional information to buying group purchasing officers as to what additional items are primarily being ordered and in what quantities.

3.3 SIMPLE, FOCUSED, AND WELL-PLANNED SYSTEMS...

To date, simple, focused, and well-planned e-commerce ventures have been relatively successful in the automotive aftermarket. Interviews and discussion groups suggest that e-commerce plans that are executed in a smaller, more closed area of the aftermarket channel have been more likely to be implemented smoothly and are currently producing their expected results.

Research conducted for this study indicates that the heavy duty aftermarket and the PBE industry have had the most success in implementing e-commerce practices within the confines of their specific business areas. Opinions on potential reasons for their success are varied, but many related this success to the specialized nature of the heavy duty aftermarket and the PBE industry as a key factor in making e-commerce projects more manageable. For example, the heavy duty aftermarket has far fewer SKUs than the light vehicle aftermarket. This limited number of SKUs, coupled with the desire to manage parts inventories because of cost and physical size of parts, resulted in a great incentive for the creation of an e-commerce parts inventory and tracking system for the heavy duty aftermarket. Fewer players in the heavy duty aftermarket and PBE industry also allowed for greater ease in building a consensus among stakeholders.

Representatives of manufacturers who produce parts for both the heavy duty and light vehicle aftermarkets expressed some frustration in attempts to get e-commerce initiatives up and running for the light vehicle market due to the number of stakeholders involved and a lack of a clear coordinated e-commerce strategy for the light vehicle aftermarket.

The PBE industry has made significant steps in implementing e-commerce systems (e.g. collision repair shop estimating, parts locating and purchasing, communicating with and billing insurance companies), partially due to its close relationship with the automotive insurance industry. As insurers look for ways to improve productivity and efficiency within their own industry, their e-commerce initiatives affect one of their major stakeholders, the PBE aftermarket. With insurers being a significant revenue source for the PBE industry, investments in equipment and systems have been rewarded with positive return on investment that clearly continues to influence ongoing implementation of e-commerce ventures between the two parties.

The advent of electronic estimating in the PBE industry has played a significant role in creating improvements in productivity and efficiency in both the PBE industry as well as the automotive insurance industry by:

- Saving time.
- Encouraging standardized repair practices and repair times.
- Streamlining parts orders and inventories.
- Creating a database of information for future planning and analysis.

3.4 B2B E-COMMERCE

Business-to-business (B2B) e-commerce is better established in the higher levels of the aftermarket supply chain with many initiatives having been launched at the top of the channel by warehouse distributors (WDs). Manufacturers and WDs have established an e-commerce relationship that includes inventory management, order inquiries, and upstream and downstream communication. Replacing paper, and many other manual processes, manufacturers and WDs have to date reaped the greatest benefits of e-commerce in the automotive aftermarket.

Driven by their e-commerce relationships with manufacturers, WDs have in turn increased their e-commerce interface with jobbers. Inventory management and order inquiry capabilities have improved productivity and efficiency at the jobber level.

Electronic cataloguing supplied to the jobbers by manufacturers and WDs has been a significant benefit to the aftermarket supply channel. Buoyed by the industry's adoption of the Automotive Aftermarket Industries Association (AAIA) standardized vehicle description system, electronic parts catalogues have become a valuable tool among jobbers and still hold much potential as the catalogues become available, and are used by stakeholders further down the supply chain.

To date, the value proposition of e-commerce has not yet been widely embraced at the installer level. While the sheer number of aftermarket installers in Canada has played a role in slowing the progress of e-commerce at this level, many within the industry also point to the lack of a clear e-commerce strategy. Leadership and direction could play a

key role in determining what levels of technology, human resource training, and financial investment may be required to successfully establish installers in an aftermarket e-commerce distribution chain.

Recently, NAPA, a major North American warehouse distributor, launched a new Internet-based ordering system for wholesalers called NAPA PROlink (<http://www.napaprolink.com>). PROlink contains up-to-date information about NAPA inventory and customers can check pricing and availability as well as order parts from a local participating NAPA store. With support from a major WD such as NAPA, a similar system, or a Canadian version of PROlink could potentially play an important role in encouraging installers to embrace e-commerce.

The automotive recycling industry in Canada has also successfully made use of B2B e-commerce. Due to the nature of supply and demand in the recycled auto parts business, an electronic connection between recyclers has allowed installers, body shops, and insurers to locate specific used parts no matter where they are located across Canada or North America, creating a business process for just-in-time delivery.

3.5 B2C E-COMMERCE

Business-to-consumer (B2C) e-commerce activity in Canada is still in its early stages. While a number of players have emerged within the Canadian market, B2C e-commerce in Canada has not yet reached the levels achieved in the United States.

A combination of vast geography, low do-it-yourself (DIY) incidence, low accessorization, and the domination of a few key retailers in the automotive aftermarket have resulted in the on-line business-to-consumer activity in Canada being relatively underdeveloped.

One of the main reasons submitted for the slower pace of B2C e-commerce adoption within the Canadian automotive aftermarket is the fact that, until recently, major Canadian WDs and retailers have not actively focused on consumer transactions for auto parts. Lower levels of DIY work in Canada have no doubt played a major role in this decision as it reduces the size of the potential target markets and may not provide enough potential dollars to justify such a venture. While it is a known fact that returns are typically high in the automotive industry, ventures in the U.S have also found that the rate of return was even higher in B2C activities. The successful non-automotive operations that exist, such as Sears, have retained a bricks and mortar component rather than shipping directly to the consumer.

Recent activities seem to indicate that the attitudes of Canadian retailers are changing vis-à-vis the automotive aftermarket. One retailer, Canadian Tire Corporation, through a joint venture with U.S. based Keystone Automotive, will play a more significant role in B2C e-commerce in Canada through the launch of www.driverfx.ca. The web site offers a

variety of automotive parts and accessories to Canadian consumers that, to date, have not been available for such a wide variety of vehicle makes and models.

Other existing B2C players in Canada are focused on niche markets, accessories, and tires. This specialized business model has allowed these existing players to develop a base of customer support in Canada, and because of favourable exchange rates, participate in the larger B2C market in the United States.

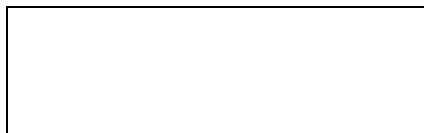
Small specialists and make specific sites have appeared in recent years, but to date, there are no truly dominant on-line parts and accessories websites operating in Canada. Existing participants include:



While Canadian Tire Corporation has a significant on-line presence with sporting goods and housewares; its automotive offerings have been somewhat limited to accessories. To date, www.canadiantire.ca still does not sell installed car parts such as alternators, brakes, or tires on the web.



1010tires.com opened its online doors in July 2000. 1010tires.com is affiliated with Tire & Wheel retailer, Volco Tires and Wheels located in British Columbia. Carrying a wide selection of wheels and tires as well as a wide range of aftermarket accessories, 1010tires is Canada's first challenger to the very successful U.S. site www.tirerack.com



Launched in the summer of 2002, www.driverfx.ca is the Canadian version of www.driverfx.com. Part of the U.S. based Keystone Automotive Group, driverfx.ca appears to be positioned to be Canada's first major on-line parts and accessories web site. Canadian Tire Corporation has teamed up with Keystone Automotive to offer Canadian consumers on-line access to a comprehensive line of parts and accessories that have historically not been available on the Canadian Tire Consumer web site. As part of this joint venture, Canadian Tire is promoting driverfx.ca on its own web site through banner advertising.



A specialty wheel and tire retailer based in British Columbia, www.tiretrends.com offers wheel and tire packages at competitive prices. Consumers can also post reviews of tires they have purchased, thus creating a database of consumer information that can be very valuable in an on-line environment.

A number of Canadian jobbers have attempted to tap the potential for Internet consumer sales in Canada and the United States. Most of the on-line jobbers are affiliated with the major WDs. While on-line sales to consumers may become more prevalent in the future, the current market penetration of these 'jobber to consumer' web sites is minimal, primarily due to the fact that consumer sales are not a core business to the jobber and they are somewhat limited by their regional focus and local awareness amongst consumers.

On-line auction sites such as www.ebay.ca have added a presence in B2C e-commerce. Automotive areas of eBay allow consumers to buy and sell new and used automotive parts and accessories through a secure and well-established web site.

To complement their existing B2B e-commerce activities, automotive recyclers in Canada have extended electronic used parts locating services to consumers. For instance:

- www.auto-recyclers.com
- www.aadco.ca

As Canadian consumers continue to become more comfortable with on-line and electronic transactions, including gaining experience with respect to shipping costs and product return issues, it is expected that there is potential for positive growth in B2C e-commerce in the Canadian automotive aftermarket.

4. WHERE DOES THE INDUSTRY WANT TO BE IN 5 YEARS?

4.1 REALISTIC EXPECTATIONS HAVE REPLACED UNBRIDLED ENTHUSIASM

E-commerce is no longer new to Canadians or to the aftermarket industry. Following the e-commerce explosion of the late 1990's, there are now more examples of success and failure to look at. In addition, working with an established e-business development company provides access to expertise and information that was not readily available in the early days of e-commerce implementation but is necessary for success.

Best practices now exist. With an established knowledge base now in place, potential e-commerce players in the Canadian automotive aftermarket have a lot more data, information and experience to analyse when proposing a new e-commerce venture.

Best practices for e-commerce in the automotive aftermarket have been documented in a number of international studies including:

- *Roadmaps to Success in e-Commerce – The Aftermarket 2001 – 2006* – Hall Automotive Research, Glen Ridge New Jersey, 2002

This report reflects the state of the U.S. automotive aftermarket industry at year-end 2001. The primary focus of the study is to present an overview of Internet/e-commerce in the aftermarket as well as the challenges, opportunities, and trends at work in the various sectors of the business. Specific information is provided on the following issues:

- Importance of B2B and B2C markets as opportunities for e-commerce.
- Relative impact of the Internet/e-commerce on aftermarket channels and sectors.
- How much business has moved to the Internet in the U.S.
- Reasons why the U.S. aftermarket is behind the rest of American industry with the adoption of e-commerce.
- Best practices/critical success factors.

The report offers sub-sector specific best practices based on companies that have been successful in either B2C or B2B. The following are examples of those best practices:

Aftermarket Manufacturers

- Understand the specific needs and values of their customers.
- Focus design efforts on solid customer input.
- Provide separate portals for different types of visitors and classes of trade or customers likely to visit the site.

- Recognize the importance of updating the site with new information, new services, and technical enhancement.
- Respect the confidentiality of site visitors.

Warehouse Distributors

- Build strong supply chain capability.
- Encourage installers to become e-commerce users.
- Structure e-commerce sites so that users have faster and easier access to inventory, delivery, and pricing information.
- Provide 24/7 customer support.
- Offer financial or other incentives to users.
- Use the e-commerce site to gain awareness of what end users want.

Jobbers

- Use e-commerce to forge closer relationships with suppliers.
- Develop closer working relationships with channel partners.
- Use e-commerce to expand market share.
- Invest in joint ventures in supply chain management with their major suppliers.

Installers

- Increase throughput of service bays through better scheduling and part ordering.
- Tighten operations through control of inventory and forecasting of demand.
- Encourage use of computers and Internet among technicians by providing easy on-the-job access.
- Collect and use accurate customer data.

One section of particular use to the current discussion is an evaluation of aftermarket web sites and e-commerce operations. As part of the study, web sites were reviewed in terms of design, information, navigation, and electronic commerce. A brief overall analysis of each site is also provided. For instance, the report indicates that the AC Delco site is mentioned by several industry executives as a leader in the aftermarket industry as it is easy to use and effectively responds to the users' needs. A variety of levels within the supply chain are evaluated including jobbers (wholesalers) such as AA Midwest, WDs (NAPA and Carquest) and retailers (Discount Auto Parts). Valuable examples of Internet based marketing/brand development are also provided, for instance a discussion of the Meineke site. The Midas site is discussed in terms of how a site can effectively communicate while providing administrative benefits through tools such as their HotJobs recruitment section.

- *Benchmarking National and Regional E-Business Policies for SME's – 2002*

This study looks at the current state of e-business and related best practices of SME's across Europe. Specific information is provided on the following issues:

- Exploration of the e-commerce gap between large enterprises and SME's.
- How SME's can increase the use of e-commerce.
- Best practices

In this report specific case studies are provided by subject matter rather than sub-sector. Best practice information is more general in nature with links provided for those who wish to locate more detailed data. The subject areas are listed below with an example of a best practice that can be found in the study:

- **Frameworks for e-business policies**

UK-UK online for business <http://www.ukonlineforbusiness.gov.uk> is a government industry partnership that consists of a range of initiatives that aim to raise awareness of the potential benefits of e-commerce and to provide advice and support for the adoption and use of ICT. The overall target for the program is to make the UK the best place in the world for e-commerce by 2004, as measured by the cost of Internet access and the extent of B2B and B2C transactions that are conducted on electronic networks.

- **E-business awareness and training**

UK/Scotland – First Steps Workshop Series

<http://www.ukonlineforbusiness.gov.uk> is a program of 4 half-day workshops to help companies exploit the potential of the Internet and electronic commerce. It is organised by Scottish Enterprise, <http://www.scottish-enterprise.com>. The program addresses goals of the 'connecting Scotland strategy' and forms part of a more wide-ranging strategy to develop e-business in Scotland.

- **Promoting SME support networks**

UK/Wales – Opportunity Wales <http://www.opportunitywales.co.uk> focuses on the provision of one-to-one support to businesses by properly trained e-commerce advisors managed by regional and sector implementation partners. Businesses located in the Objective 1 areas of Wales are eligible for financial support and training to assist them in the implementation of e-commerce solutions. Opportunity Wales replicates and enlarges small-scale projects that have already been successfully implemented in other parts of the country.

- **Promotion of Internet platforms for SME's**

Ireland – Empower <http://www.empower.ie> is an e-business initiative for small businesses delivered by the Irish City and County Enterprise Boards on behalf of the Department of Enterprise, Trade, and employment <http://www.entemp.ie/>. All city and county enterprise boards in Ireland are

assisting small business through a series of grants including technical grants towards the cost of project management, e-business software packages, website development, and e-business training grants.

While the value of e-commerce and its potential benefits are well understood by automotive aftermarket stakeholders, new ventures are now approached with caution. Players now look for well-thought e-commerce plans, realistic use of available technology, and perhaps most importantly, how the new system will increase their productivity and efficiency.

In addition to having more available information on successful e-commerce ventures and best practices associated with them, players in the Canadian automotive aftermarket now have access, through market research, to data tracking consumer and end-user e-commerce attitudes and buying habits. Better understanding end-user and consumer needs and desires has assisted many companies in designing and implementing e-commerce systems that are tailored to their customers' needs and expectations.

4.2 CLEAR DESIRE TO LINK DISTRIBUTION CHANNELS

Interviews and discussion groups held with various players in the Canadian automotive aftermarket clearly indicated that the concept of linking the aftermarket supply chain through e-commerce is a sound one. Few arguments have been put forward against the concept of linking the aftermarket distribution chain from top to bottom electronically, however, there are varying opinions on how such a link should be accomplished and who should play a leadership role.

Some of these opinions included:

- Closer association with AAIA in the U.S. and a greater focus placed on the existing i-SHOP program (see section 5.1 for a description of this program).
- The formal development of an e-commerce strategy for the Canadian automotive aftermarket.
- Greater involvement of existing Canadian WDs so that a strategy has a better chance of success.

Various interview respondents indicated that the Canadian automotive aftermarket is in need of guidance and leadership to move forward in building a lasting and effective e-commerce strategy. AIA and the major Canadian WDs are seen as the two main groups who could take a leadership role in moving these initiatives forward.

One of the key drivers for recognizing the need to link the aftermarket distribution chain electronically appears to be the realization that consumer expectations do exist. Not only are players in the aftermarket learning how consumers and end-users want to be treated, but they are also being influenced by personal experiences with electronic commerce that have led to feelings of convenience and satisfaction. Generational issues also play a role in justifying the need for connectivity. Young people today are comfortable with and expect to use technology. Buying, researching and communicating online are all they have known. However, consumer behaviour for the under 30 age group is substantially different than for those over 45 and these variables must be recognized and used as part of any e-commerce strategy.

4.3 PRIMARY GOAL - INCREASING PRODUCTIVITY AND EFFICIENCY

A reoccurring theme throughout the discussion of e-commerce in the Canadian aftermarket has been the need for a focus on productivity and efficiency. Productivity and efficiency were identified as the primary drivers for decision-making at nearly every level of the aftermarket distribution chain.

While many sellers of e-commerce solutions in the late 1990's claimed possible upside savings of 10% to 15%, a U.S. study (*Roadmaps to Success in e-Commerce – The Aftermarket 2001 – 2006*) indicates that real improvements in order fill, error rate, and inventory turnover range from 2% to 5%. In addition, the effect of e-commerce on productivity, response time, and customer satisfaction in the automotive aftermarket has not been widely verified through market research. Historic observation would lead us to believe that any new process that creates greater productivity and efficiency will eventually have a positive effect on the bottom line.

Three major reasons have been cited for needing to improve productivity and efficiency within the Canadian automotive aftermarket:

1. To prevent the flow of consumers to new car dealerships

- New car dealerships are actively soliciting aftermarket service business.
- New technology may extend dealership service years.
- Vehicle manufacturers are actively promoting improvements in productivity and efficiency at the dealership level.

2. To help pay for higher cost technicians, service advisors, and equipment

- Trained and experienced technicians will become an even more valuable commodity in the future.
- Trained and experienced service advisors will become an even more valuable commodity in the future.

- New vehicle technology and government regulation will require additional investment in specialized shop equipment.

3. To maintain profitability throughout the aftermarket channels

- The overall health and success of the Canadian automotive aftermarket is dependent on the health and success of all players within the distribution chain.

5. MISSING CAPABILITIES & POTENTIAL ROADBLOCKS

5.1 E-COMMERCE STRATEGY EMBRACED BY THE INDUSTRY

A potential gap that may prevent the Canadian automotive aftermarket from achieving higher e-commerce goals is the absence of a well-defined path forward that is embraced by the entire industry. Most existing strategies are specific to a segment of the aftermarket supply chain or to individual buying groups or WDs. A more cohesive and universal strategy with defined leadership roles to which all players can subscribe would provide a road map for moving forward with clear goals that can be achieved along the way.

Interview and focus group discussion participants in this research study see a direct correlation between the current lack of 'buy-in' for e-commerce goals and the lack of a cohesive e-commerce strategy across the industry.

While the aftermarket will no doubt continue to progress in its e-commerce development, a formal strategy, addressing technology standards, goals, and best practices could help the industry move forward in a manner that is currently not possible.

Some attempts have been made to develop common technology platforms in the automotive aftermarket, but these efforts are not grounded in a broad strategy that would encourage industry-wide participation. A prime example is i-SHOP <http://www.ishopstandards.org>, an open shop integration standard that permits computer-based products and services in an automotive service facility to work together as one seamlessly integrated system. Technicians in an integrated shop can access all the information needed to complete a repair from any workstation.

i-SHOP is the result of the Shop Integration Task Force, coordinated by the Automotive Aftermarket Industry Association (AAIA) Electronic Commerce Committee. The technology was developed by Snap-on, the Enterprise Alliance, ASA-Net in Europe and others around the world to create a single open standard.

Canadian Tire has played a significant role in the testing of i-SHOP in Canada through the creation of several state-of-the-art service bays to test a fully functional integrated shop environment, featuring the latest service and repair tools and diagnostic equipment from i-SHOP participants: Snap-on, SPX, Vetronix and ALLDATA, Hunter, and Autologic.

Secondary research into automotive aftermarket e-commerce in the United States and Europe indicates that neither region has yet established a broadly supported industry e-commerce strategy. This is primarily due to the very young nature of the industry and the fact that the process of understanding and flushing out successful strategies is ongoing. As previously mentioned in section 4.1, benchmarking studies in the U.S. and Europe were completed in 2002. The full effect of and reaction to these studies need to be

further examined. One thing we do know is that throughout the process of developing an e-commerce strategy for Canada, coordination must occur with American groups in recognition of the fact that many companies must work within parameters set by head offices in the United States.

5.2 REALIZING A VALUE PROPOSITION AMONG INSTALLERS

Perhaps the greatest challenge to linking the aftermarket supply chain in Canada through e-commerce is identifying and relaying an e-commerce value proposition to installers.

This e-commerce value proposition is quite simple:

- Increased productivity and efficiency through faster access to parts, better time management, and access to on-line training/diagrams.
- Potential to improve customer service due to better time management and greater communication.
- Potential for greater revenue /profit through better time management, higher levels of customer service, reduced parts inventories, and lower parts returns.

In the case of the OES (car dealer) channel, the installer e-commerce value proposition has been demonstrated and established through extensive communication and training. Vehicle manufacturers have provided dealers with e-commerce tools such as on-line parts ordering, warranty management, training and customer management systems.

Once established, the effectiveness of these OES e-commerce systems have been measured and monitored by the manufacturers. While many dealers initially perceived that these e-commerce systems were being forced upon them, they eventually realized that the improvements to their productivity and efficiency were in most cases improving their bottom line. Presently, companies such as Reynolds & Reynolds, ADP, and TIMs have developed a multi-billion dollar business servicing the OES installer base.

Focus group participants cited the following potential reasons for the low level of e-commerce penetration at the installer level in the traditional aftermarket:

- Perception of higher cost
- Perception of complexity
- Unproven benefits versus cost
- Human resource and training issues
- Lack of an established communication channel between installers and the rest of the aftermarket channels

As the primary source of consumer demand for automotive aftermarket parts and service, the installer must play a critical role in the planning and achievement of future e-

commerce goals, and more importantly, must be fully integrated into an e-commerce strategy for the industry. The installer, as the front line with consumers, has the critical job of collecting accurate and current customer information that can be used throughout the distribution chain.

The consumer information collected by installers is the foundation of Customer Relations Management (CRM). CRM is a very valuable tool in creating and maintaining consumer satisfaction as well as prospecting and developing new business opportunities among existing customers. For CRM to work effectively, data quality is key. Once captured, this data can be 'mined' to profile a current customer base and determine if there is additional potential to develop the customer relationship.

Development and use of CRM is currently a top priority among vehicle manufacturers at the OES-dealership level with the primary goal of maintaining consumer loyalty outside the warranty period of the vehicle into its prime aftermarket years.

5.3 TOOLS AND CAPABILITIES

The principal goal for e-commerce has been identified by automotive aftermarket companies as increased productivity and efficiency. Achieving this goal will in part be dependent on a move away from proprietary technology to more open systems. The growing support for XML (extensible markup language) may be the catalyst needed to move many industries, including the automotive aftermarket towards this goal.

Development of common systems and technology platforms can play a significant role in reducing the cost and complexity of e-commerce implementations. Standard technology platforms have played a key role in e-commerce strategies among vehicle manufacturers at the dealership level. Service, support, and training are always easier when fewer technology platforms are involved.

As many legacy EDI systems are replaced in the coming years, the adoption of XML technology throughout the automotive aftermarket could play a significant role in the standardization of technology. It was developed by the World Wide Web Consortium and has rapidly become the standard for defining data interchange formats within the Internet world. A mark-up language is a set of data descriptions (tags) and rules that simplify and enhance the process of data interchange between unlike computer systems.

XML is similar to HTML (HyperText Markup Language) in that it uses tags to encode information on the Internet. However, the similarity ends there. HTML tells browsers, such as Internet Explorer or Netscape, how to display information on a web page whereas XML defines values for the information. Also, unlike HTML which has pre-set identifier tags, XML gives users the freedom to create their own tags.

The widespread adoption of XML may compel rethinking of current proprietary or 'closed' systems in favour of more open architecture that will be more accommodating to other players further down the distribution chain.

As previously mentioned, greater support of i:SHOP Standards in Canada could help the industry in providing an additional tool to increase productivity and efficiency.

Vehicle identification number (VIN) decoding, could also contribute to increased productivity, efficiency, and customer satisfaction by providing a direct link from the VIN of a vehicle to its parts and service specifications. Additional research on existing VIN decoding systems, and their potential for integration into electronic cataloguing would be valuable for the aftermarket.

5.4 COST OBJECTIONS

Cost is always a concern at any level of the distribution chain, and especially at the installer level where the establishments are typically small. As part of an industry e-commerce strategy, the cost of technology, obsolescence issues and human resources and training should be addressed so that each potential cost objection can be answered with clear benefits.

Interview and focus group discussion has indicated that there is a willingness to invest money into e-commerce in the Canadian automotive aftermarket if it can be demonstrated that a benefit can be derived. It has been suggested that an e-commerce strategy for the aftermarket should include significant content on features and benefits of e-commerce to adequately address cost objections.

Vehicle manufacturers have addressed cost objections of car dealers by either subsidizing technology (directly or indirectly) or adopting a policy of weighing penalties against dealers who lag behind. These penalties may include reduced bonus potential and access to desirable vehicles. In many cases, the competitive disadvantage of non-compliance is very apparent to the car dealer, resulting in very few penalties ever actually being levied.

6. TOPICS FOR FURTHER EXPLORATION

Through the course of this research study a number of recommendations and opinions were provided by interview and focus group participants. Four specific items have been identified for possible future exploration:

6.1 DEVELOPMENT OF AN E-COMMERCE STRATEGY

Whether unique to the Canadian automotive aftermarket or based on the experience of other industries, the research conducted for this project clearly indicates that the future success of e-commerce in the Canadian automotive aftermarket could be fundamentally enhanced by the development of a comprehensive e-commerce strategy. 'Buy-in', cooperation and participation from all levels of the aftermarket distribution chain would be required to ensure this strategy is workable and to ensure widespread adoption.

Steps for development of an e-commerce strategy could include the following:

- Identification of all potential stakeholders
- Formation of a coalition of stakeholders
- Identification of key players/industry champion(s)
- Determination of roles
- Definition of Canadian automotive aftermarket e-commerce goals
- Development of a formal e-commerce strategy

E-commerce development in the aftermarket is ongoing. A formalized strategy could play a significant role in pulling all the pieces together to ensure convergence, as well as assisting players within the automotive aftermarket distribution chain in budgeting for the financial, technological, and human resources needed to participate in company specific and industry-wide e-commerce initiatives.

6.2 LEADERSHIP ROLES

Leadership will be a key factor in the development and implementation of an e-commerce strategy for the aftermarket.

The PBE sector has already forged ahead with e-commerce and can provide valuable information through case studies and best practices.

There is a clear indication from interview and focus group participants that the Automotive Industries Association of Canada (AIA) could play an important role by continuing to provide guidance to the industry on e-commerce related issues. This could be done through participation in the current U.S. automotive aftermarket technology

forum, which might be expanded to include Canada, both in terms of topics and attendance. Other options would be participating in councils that address technology issues, providing market research on industry trends and issues, offering training or seminars at AIA conferences/regional events and providing targeted information such as the current “Getting Connected” series.

It would make sense that AIA continue its current leadership role as the coordinator of e-commerce related market research for the Canadian automotive aftermarket since AIA can provide a variety of insights on these issues. For instance, AIA could provide information regarding demographic shifts, consumer behaviour, attitudes towards public transportation and DIY which are all areas that can impact the competitiveness of the aftermarket and help shape how technology can be effectively used.

6.3 PARTNERSHIPS AND COOPERATION WITH INSTALLERS

Partnerships and cooperation with installers in the development of an e-commerce strategy are a key concern. Recognition has to be given to the fact that any attempt to coordinate with the vast number of aftermarket installers across Canada will not be an easy task. However, the potential benefits of doing so, such as significantly improving the probability of success of an industry-wide e-commerce strategy, may make this a worthwhile endeavour.

Participants in this research study indicated that cooperation from the WDs and major Canadian retailers would be important. Their participation is deemed to be crucial in generating buy-in amongst aftermarket installers and wholesalers for a formal aftermarket e-commerce strategy.

Partnerships with groups connected with the installer community such as regional installer associations would provide additional support and input.

6.4 UNDERSTANDING THE ROLE OF THE FUTURE CONSUMER

The habits and expectations of future automotive aftermarket service and parts customers, especially young consumers currently in the 14 – 20 age group, appear to be of great interest to the automotive aftermarket. As vehicles become more complex, there is also the question of whether this younger generation will actively participate in a future DIY market. Will frequency of mechanical DIY decline, or will this decline in mechanical DIY be offset by a higher level of accessorization? These are areas where AIA could provide the industry with valuable market research data.

A generation of consumers now exists who apparently seem to have little problem with a ‘faceless’ e-commerce transaction on the Internet. This group of consumers readily

purchases products and services on-line with apparently few concerns about security or eventual delivery. To them, buying on-line is the norm.

Participants in this research study expressed great curiosity in understanding what future automotive aftermarket expectations exist amongst this 'wired' generation. Will the expectations of this new group of consumers change the way the automotive aftermarket currently does business? Understanding the young consumers should be a key priority of the Canadian automotive aftermarket.

Longer vehicle warranties may also have an effect on the expectations of future consumers. As warranty periods are extended, the potential exposure of new customers to the traditional aftermarket is reduced. There are also indications that vehicle manufacturers, through dealers, will be doing everything possible to understand and retain their customers. It stands to reason that Customer Relations Management (CRM) is an extremely high priority among vehicle manufacturers and that e-commerce is seen to be one of the key components supporting CRM.

7. FINAL SUMMARY AND RECOMMENDATIONS

The application of e-commerce in the automotive aftermarket has begun to move forward in some sectors more so than others based on business imperatives and the ability to invest. The industry is benefiting from the trickle down process occurring from manufacturers to WDs to wholesalers. However, operational efficiencies and reduction of transaction costs are not as apparent in the lower ends of the supply chain. Work still remains to be done to provide an appropriate business case at the installer level.

Cooperation from key players at each level of the supply chain in the Canadian automotive aftermarket is required to achieve a common goal. The industry can capitalize on experience and best practices that now exist within the supply chain that were not previously available. Throughout the process of developing an aftermarket e-commerce strategy for Canada, cooperation and coordination must occur with American groups in recognition of the fact that many companies must coordinate or work within parameters set by head offices in the United States.

Vehicle manufacturers have already begun to build global cooperative portals for business transactions and parts procurement. The work already done by vehicle manufacturers may provide a blueprint upon which a Canadian aftermarket solution can be designed and established. The Automotive Industries Association of Canada (AIA), as a neutral player, is a logical choice for facilitating discussions about, and potentially coordinating the development of such a portal.

Recognition has been given to the growth and importance of the Internet, including the acceptance of this medium by the next generation of employees and consumers. The task now is to ensure the industry has a viable, achievable plan for moving towards a more integrated supply chain that can utilize e-commerce as a stepping-stone to stronger, cost-effective business practices.

Based on the research for this study, the following are suggested recommendations for development of an e-commerce strategy in the automotive aftermarket:

- Identification of key players and required roles in the development of an e-commerce strategy.
- Roundtable discussion(s) with leaders from each of the aftermarket sub-sectors to review issues and ascertain the potential for cooperation in developing and implementing an industry-wide e-commerce strategy.
- Developing partnerships with regional, national and North American groups that can facilitate the development and implementation of an e-commerce strategy.
- Inclusion of e-commerce issues at national or regional events. This may include keynote speakers, seminars, training workshops or displays.

- Continued participation in groups such as the Aftermarket Council on Electronic Commerce (ACEC).
- Provision of market research on issues relevant to an e-commerce strategy.
- Dissemination of information on e-commerce through such vehicles as the AIA website, e-newsletter and AIA magazine.
- Development of an IT Forum tailored to the Canadian aftermarket or participation in the current U.S based forum to expand the content and attendance to include Canada.
- Discussions with Industry Canada and Human Resources Development Canada (HRDC) to determine where the Federal Government currently has programs that encourage e-commerce initiatives and to identify further areas of cooperation.
- Creation of a resource page on the AIA website to direct members to relevant sources of information.

With adoption and action taken on the above recommendations, companies throughout the Canadian automotive aftermarket chain will be positioned for future success with the North American and global e-commerce communities.

The rapid pace of e-commerce and technology development in the marketplace makes time a critical factor in developing and implementing an e-commerce strategy for the Canadian automotive aftermarket. Long-term delays in initiating an e-commerce strategy could potentially require additional time and investment to ‘catch up with the pack’ and potentially result in a competitive disadvantage for the industry.

Through the development of this research study, it has become quite apparent that there are many individuals and organizations with the knowledge, drive, and enthusiasm to move forward. Capitalizing on these very positive industry attributes will lead to success.

Appendix – Focus Group Discussion Notes

September 12, 2002

1. Welcome and Introductions

- *Welcome to DesRosiers Automotive Consultants*
- *Introduction of the Moderator – Brent Burpee*
- *Introduction of the participants – Each participant will introduce themselves, what company they are from.*

2. Purpose of the Focus Group

- *Explanation of the AIA / Industry Canada Study and how this focus group is part of a larger, comprehensive study of e-commerce in the Canadian automotive aftermarket.*

Goals:

- *Discuss the current state of e-commerce within the Canadian Automotive Aftermarket,*
- *Discuss where should e-commerce be in the automotive aftermarket in 5 years?*
- *Explore Issues that may hinder an organization from meeting its e-commerce goals*

3. Rules and Expectations

- *We want to do our best to make sure that everyone has the opportunity to express their experience and opinions.*
- *Please do not be offended if we have to move on to another person in order to let everyone speak.*
- *Due to our time restrictions, please keep the discussion on topic.*

4. Discussion

Part I - State of E-commerce Within the Canadian Aftermarket

**Identify attributes of current e-commerce Portals – What do they do? –
*RESPONSES WILL BE LISTED – Looking Specifically for:***

- Upstream inventory control
- Upstream communication
- Upstream financial transactions
- Downstream inventory control
- Downstream communication

- ___ Downstream financial transactions
- ___ On-line catalogues
- ___ On-line training and support

Background / Attitude

- i. *When did your organization first begin to realize that e-commerce would, or must, become part of your business?*
- ii. *Did the demand for an e-commerce portal in your organization come from above (manufacturers) or from below? (Consumers / jobbers)*
- iii. *Did your organization instigate e-commerce activities on its own or did you secure the services of others to assist you?*
- iv. *In your opinion, did your organization enter the e-commerce arena enthusiastically (with a clear understanding of the potential benefits) or were you forced to react to prevent a potential (or perceived) competitive disadvantage?*
- v. *Were your original e-commerce plans increased or scaled back before your portal actually went on-line. Why?*
- vi. *Did implementing your e-commerce portal cost more, or less, than you expected? Why?*
- vii. *Was your e-commerce portal created as part of a long-term vision, or did you expect some immediate results?*
- viii. *How long has your e-commerce system been operational? How long have you been using a portal created by someone else?*
- ix. *Is your e-commerce portal being utilized as you had expected? What were your expectations?*
- x. *What was the greatest challenge in getting your e-commerce portal up and running? **RESPONSES WILL BE LISTED***
- xi. *Were you required to make investments in technology in order to get your e-commerce portal up and running? How much did you spend?*
- xii. *(B2B) Were your customers (jobbers) required to make investments in technology to use your e-commerce portal? Did they pay for it themselves? Did you provide any subsidies? What kind of subsidies? **RESPONSES WILL BE LISTED***

- xiii. *Role of incentives / pressures for lagging firms from customers / suppliers.*
RESPONSES WILL BE LISTED
- xiv. *Effect on order fill, error rates, and inventory turnover?*
- xv. *Effect on productivity, response time, customer satisfaction / retention?*
- xvi. *Has your e-commerce portal made you money? Saved you money? Cost you money?*
- xvii. *Overall, would you consider your e-commerce portal to be a success? How have you measured this?* **RESPONSES WILL BE LISTED**

Part II - Where should e-commerce be in the automotive aftermarket in 5 years?

- i. *What do you expect that your e-commerce portal cannot do now that it will be able to do in 5 years?* **RESPONSES WILL BE LISTED**
- ii. *Effect on order fill, error rates, and inventory turnover?*
- iii. *Effect on productivity, response time, customer satisfaction / retention?*
- iv. *Standardization? Open system vs. closed system. What will encourage or prevent this from happening?* **RESPONSES WILL BE LISTED**
- v. *Use of Vehicle Identification Numbers (VINs) for vehicle identification?*
- vi. *Data sharing? Centralized data collection?*

Part III - What may hinder an organization from meeting its e-commerce goals?

- i. *Data security / Privacy?*
- ii. *User attitudes? Apathy?*
- iii. *Where are the potential roadblocks located within the supply chain?*
RESPONSES WILL BE LISTED
- iv. *How can these roadblocks be overcome?* **RESPONSES WILL BE LISTED**

5. Wrap-up and Thank-you