

AN INDUSTRY CASE STUDY OF THE IMPACTS OF ELECTRONIC COMMERCE ON CAR DEALERSHIPS IN WESTERN AUSTRALIA

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ABSTRACT

The study reported in this paper was undertaken in an attempt to identify and understand the impacts of electronic commerce in the car retail industry in Western Australia. Much of the existing literature in electronic commerce puts forward theoretical models and speculative argumentation in an attempt to describe and understand the electronic commerce phenomenon. In contradistinction to this type of approach, this paper reports on an empirical investigation of the perspectives of senior executives (CEOs and/or owners) as to their actual experiences of and beliefs about the impacts of electronic commerce in the retail car industry in Western Australia. These viewpoints and perspectives were elicited during face-to-face, semi-structured interviews lasting between 1.5 and 3 hours. Generally speaking, the executives interviewed are experiencing great uncertainty with respect to electronic commerce and its effect on their business: they are uncertain about its likely impacts long term (although not much is currently happening), they are uncertain about the ultimate magnitude of electronic commerce in their industry, they are uncertain about the costs and benefits of electronic commerce investments, but they are unwilling not to be involved at all. There appear to be few articulated and carefully thought-out business strategies driving their electronic commerce activities at this stage, nor is there much evidence of internal business processes being reengineered to accommodate the requirements of an electronic commerce presence. In addition, a number of drivers and inhibitors of electronic commerce from the perspective of these CEOs in the car retail industry are also identified.

Key words: Internet Auto Sales, Electronic Commerce, Industry Drivers, Industry Inhibitors

1 Introduction

Electronic commerce is said to have the potential to alter industry structures and affect the way businesses compete for markets [Applegate et al. 1996]. These effects are already apparent in some industries and specific business organisations in the US particularly [Robinson 1999], and are just now becoming visible in Australia (see Lawrence et al. 1998, DFAT New Silk Road). Generally speaking, the changes currently being witnessed and experienced are argued to be the beginnings of dramatic and continuing transformation of business practice that will continue into the 21st century [OECD 1998, Hornback 1995]. To give substance and clarity to these beginnings some empirical studies of particular industries in particular countries and regions are needed [Robinson 1999]. Some academic studies are available from the US [Senn 1999]. However, thus far, there have been comparatively few such quality research efforts in specific industries outside the US. Arguably therefore, there is a need for Australian-based empirical research particularly at the industry and supply chain level to identify and validate early trends in electronic commerce, and to evaluate and further refine strategies being adopted by business in response to the e-commerce phenomenon.

This paper is a report of the preliminary analysis of research conducted into the impact of electronic commerce (with a specific interest in the impact of the Internet) on the business activities of used car dealers in Western Australia. It focuses particularly on the anticipated impacts and trends of electronic commerce with respect to the business practices and behaviours, and decision making of car dealers. By way of introduction,

however, an experience of one of the authors serves to illustrate some of the trends that the research has to date uncovered.

One Friday night, one of the authors (Peter) and his partner finally received the death notice of their aged Toyota: their mechanic further advised them to purchase another second hand Toyota (maybe a Camry or a Corolla). Armed with this suggestion, Peter, like all good IT enthusiasts, headed to the Web for help and information. Carsales.com.au provided a wealth of potential, second hand Camrys located in Perth, and despite the necessity of endlessly repeating personal details for each query, Peter maintained enthusiasm throughout the somewhat arduous task of sending out e-mail messages expressing interest in various Camrys advertised on the Internet to a range of concerned dealers. E-mails or phone calls early on Saturday were expected in response from salespersons eager to make a sale.

The next morning was notable not for the expected endless phone calls from diligent sales staff, but rather for the crashing silence surrounding the phone. Nothing whatsoever happened. No phone calls, no over-enthusiastic sales staff lusting to make a sale, nothing – it was almost as though the eager search activity on the Internet of the previous evening was still up in Cyberspace! By mid-morning, Peter and his partner reverted to a more conventional approach of phoning various car dealerships and arranging for personal visits to the various car yards. In passing, one should note however, that these calls and the subsequent arrangements were informed by the previous nights' Internet searches. Which car dealerships were worth visiting was an issue that had been thoroughly researched on the Internet.

The first phone call received in response to Peter's queries on the Web came in on the Monday. The second (and last) call came in on the Friday, exactly one week after the e-mails had been sent requesting a phone call or e-mail in reply. The other car dealerships e-mailed by Peter never bothered to make contact in any form at all.

So why is this indicative of the research results? Well, all the used car dealers involved in the study to date are well aware of the Internet, are somewhat aware of the trends in the US, and the potential of electronic commerce and the Internet to transform their business and to have an immense impact on the way they operate as a business. They are all represented in Web sites of various types, or are in advanced stages of preparation of a web presence. But while the promises and the potential are vaguely understood, there appears to be comparatively little direct activity, comparatively little evidence of businesses being engineered to support web-based customer interactions of various types, and a pervasive attitude of "*We've got to be there because this could be really big, but there's not much happening at the moment*". The paper which follows will describe the research project and explore some of these themes more fully.

2 The Impacts of Electronic Commerce

While electronic commerce can mean many things and has been subjected to a wide range of definitions in its comparatively short history (see Mougayar 1998, Haag et al. 1998, O'Connor & Galvin 1998, for a variety of approaches to electronic commerce, for example), for the purposes of this paper a fairly exclusive definition of electronic commerce will be adopted. Thus, electronic commerce will be regarded as involving the buying and selling of goods and services over the Internet, and related information provision and gathering [Whiteley 1999, von Versen 1999]. Thus defined, electronic commerce would include business-to-business, and business-to-end consumer transactions and information provision over the Internet [Senn 1999].

Many pundits have forecast enormous impacts from electronic commerce in most industry sectors, predicting momentous changes in the world of commerce as we know it today. For example, Tapscott [1998: 2] writes that "just beyond the horizon is a 100-foot-high tsunami, which...will sweep us away if we don't get ready". [Tapscott 1998] may tend to paint an overly vivid canvas of electronic commerce, but underlying some of his melodramatic assertions are important issues and arguments. The interconnectivity and pervasiveness of the Internet do open new possibilities for the organisation of work, for the management of the supply chain and formation of dynamic trading networks [Scharl and Brandtweiner 1998, McQuivey et al. 1999], and for entrepreneurs to meet the needs and demands of ever-better informed consumers [Hoffman et al. 1999].

These trends clearly impact the retail sector, with disintermediation (the removal of one or more stages of the industry supply chain), argued not only to be a distinct possibility but an increasing phenomenon [Choi et al. 1998, Mougayar 1998]. While some authors go as far as to predict the demise of bricks and mortar, 'High Street' shopping [Cope 1996, Davidow and Malone 1992, Mack 1998, Kelly 1998], others forecast a rapid growth in Internet shopping but still anticipate healthy activity in High Street shops, arguing that such shopping in fact meets important social, cultural and psychological needs [Markham 1998, Maruca 1999, Robinson 1999]. The extent of the impacts of electronic commerce in retailing remains somewhat difficult to predict with accuracy: conservative estimates suggest that Internet shopping may ultimately account for 10 – 15% of the retail sector [Markham 1998, Reynolds 1997], but, like catalogue and TV home shopping before it, on-line shopping will not capture more than a small proportion of total shopping revenues. These estimates, however, may still seem a little conservative when compared to actual growth statistics for a society such as the US.

Estimates for the revenue generated from on-line shopping in the US in 1998 was \$14 billion (about 1%), a figure expected to rise at a compound growth rate of about 70% over the next few years. Should this forecast be

realized, it would mean that the revenue from on-line shopping would be approximately \$110 billion by 2003, representing about 6% of the US consumer retail spending in 2003 [Copulsky and Roddy 1999]. The largest categories of on-line retail currently involve the so-called media products (software, books, music and videos), event ticketing, travel, and consumer electronics [Foley et al. 1999]. Arguably as a particular categories' on-line sales surpass 10% of total sales, retailers will be forced to change their business models and practices, and take account of these trends towards electronic commerce [Robinson 1999, McQuivey et al. 1998, Salnoske 1999]. Of particular interest for this paper are trends in car sales, with obvious interest placed in the changes to existing High St car yard business practices and models.

2.1 The Impacts of Electronic Commerce on the Car Retail Industry

As there is to date no known published information on the effects of electronic commerce on car retailing in Australia, discussion at this stage must be limited to a consideration of trends and forecasts in the US. Sales of cars in the US, both new and used, have not escaped the impacts of electronic commerce. By 1998, for example, it was argued that more than 10% of sales of new and used cars were influenced by the Internet. Thus, 2 million purchases of new cars and 4.2 million purchases of used cars were reliant to some extent on electronic commerce [Ohlson 1999, McQuivey et al. 1999]. The exact role of electronic commerce and the Internet perhaps need to be clarified however. In retail categories such as software, books and event ticketing, for example, electronic commerce plays an important role in most, if not all, phases of the business transaction. Thus, information provision, purchase request, financial transaction, and possibly delivery of the good (for software particularly) are all facilitated by the Internet, for example. Typically, this is not the case in the car industry, nor is it predicted to be [McQuivey et al. 1998].

Currently, most car purchasers whose decision making is influenced by the Internet are using it to research vehicle types and features, and to identify and locate vehicles potentially of interest. Thus, some consumers are using service providers such as CarPrices.com and IntelliChoice.com, and the Web sites of various manufacturers, for example, to gather information about various vehicles for comparative purposes [Ohlson 1999]. Having made a decision about the make and model of car(s) in which they are interested, typically these consumers then go about transacting the rest of their car purchase in the more traditional manner. Of the 2.8 million Internet-influenced sales of new cars in 1998, approximately 2 million of these used the Internet for exactly this purpose [McQuivey 1999]. Most of the remaining Internet-influenced purchasers used the Internet to locate a dealer stocking the particular type of vehicle they are interested in. Autobytel.com, Autoweb.com and Cars.com are all examples of web sites facilitating the location of potential cars with particular dealers, offering in addition information about the cost of the vehicle and the particular features. The remaining 0.8 million of Internet-influenced new sales resulted from the early stages of the car purchase being informed by the Internet in the manner just described [McQuivey et al. 1999].

At the moment, almost no complete sales were orchestrated over the Internet, nor were additional arrangements such as finance, insurance and additional warranty options generally made over the Internet. Both these areas however, are anticipated to become available by 2000, and to grow substantially by 2003 [McQuivey et al. 1999].

Thus, in America at the moment, comparatively few new car sales are made directly by the car manufacturer to the end consumer. Occupying a far more important role in both the new and used car marketplace are various intermediaries (such as Autobytel.com and AutoConnect.com), who each list many dealers and offer the consumer the ability to search on various parameters, such as car type, price range, geographic location, and so on, in order to locate a smaller cohort of potentially suitable cars within reach of their homes or offices to facilitate further personal enquiry. Consumers have very substantial listings to search through and select from: Autobytel.com, for example, boasts listings of 300,000 vehicles, while other similar sites have inventories of over 0.5 million motor cars. In total, it is estimated that more than 4 million used cars will be listed on these on-line buying services in 1999, some 10% of the used cars that will be purchased this year [McQuivey 1999]. These intermediaries offer car dealers a substantial number of referrals each month: the larger and more successful sites may be referring more than 100,000 clients to dealers each month [McQuivey 1999]. Thus, in a sense, the dealers lose some of their independence somewhat, as consumers are empowered to select potential cars for purchase across a number of different dealers. Selection (and hence selling) thus becomes a more information intensive activity than a personal one, at least in its early stages. For the dealers it represents a change in business behaviour, away from the traditional model of individual dealers advertising, having a High St presence, and relying on the skills of their sales team to close deals with their customers, at least for a subset (a small but growing cohort) of their customers.

It could be argued that the US experience with electronic commerce seems several years in advance of Australia with respect to its acceptance and adoption of on-line retailing, and given reasonable similarities in business trends and culture between the US and Australia, it could provide a useful model for local businesses to consider in order that they can prepare for the future. However, it could also be asserted that there are important differences in the Australian business environment, thus rendering the data and trends from the US unreliable as predictors of trends in Australia. For example, while electronic commerce is reported to be growing

exponentially in the US (USIC 1999), Australian small and medium enterprises (SMEs) are reported not to view electronic commerce as core business, and are somewhat hesitant in their approach and uptake of electronic commerce initiatives, despite high levels of Internet connectivity [DIST 1998, Poon and Swatman 1997, Small Business Index 1999]. Thus an important aim of this study was to determine whether for the automobile industry, the US model of a vigorous and rapid uptake of electronic commerce was suggested for the near future in Australia, or whether the relative sluggishness of SMEs generally in Australia with respect to electronic commerce would be mirrored specifically in car dealerships.

3 The Research Project

The research project was exploratory in nature, aimed at discovering the perceptions, understandings, and beliefs of senior decision makers with respect to the impacts of electronic commerce in the car industry, and thus was interpretivist in nature. It was designed to consist of a series of qualitative, semi-structured, research interviews with senior executives (managers and/or owners) of a variety of car dealerships in the Perth metropolitan district. All the car dealerships involved in the study would be classified as SMEs. Each interview was based on a set of interview questions, which were drawn from an extensive literature review encompassing the trends in electronic commerce in the retailing sector, and specifically, in the car industry. Questions were also based on the authors' knowledge of electronic commerce trends in Australia. Some flexibility in approach was adopted to accommodate and be responsive to the varied responses received from interviewees. The interviews conducted lasted between 1.5 and 3 hours, and were crafted to encourage the senior executives interviewed to describe their understandings of electronic commerce, and to articulate their beliefs about the impacts of electronic commerce and the Internet on their business activities and practices in the future. The interest of the researchers was thus to arrive at an understanding of the impacts of electronic commerce from the CEOs'/owners' perspectives and to reveal their feelings and beliefs about electronic commerce, indicating that the qualitative research interview was an appropriate vehicle for the conduct of this research [Kvale 1996]. The decision to interview CEOs and/or owners was predicated quite simply on the fact that these were the people with the authority and responsibility to make decisions for their organisation in terms of their involvement in electronic commerce. They may not necessarily have been the most knowledgeable in the organisation in terms of electronic commerce, but in all cases in this study, they were the person in their organisation charged with making investment decisions with respect to electronic commerce, and that decision making was obviously influenced by their beliefs and knowledge about the potential of and trends in electronic commerce. All the interviewees to date have established Web sites for their businesses, or plan to do so in the near future, although this was serendipitous and was not a part of the original research design.

Theoretical sampling [Charmaz 1983] was used as the basis for sample selection in this research. Theoretical sampling "means sampling aimed towards the development of the emerging theory" [Glaser and Strauss 1967]. It seeks to identify conceptual categories appropriate to a given study. Sampling and analysis proceed in tandem so that the decision as to which item will be sampled next depends on the results of the cumulative analysis to that point. The next item selected may be one that the researcher has been lead to believe exhibits a category not yet sampled, it may be a counter example for a category sampled earlier, or it may fill out a category already identified [Strauss and Corbin 1990]. Sampling continues until saturation is reached, indicating that no new conceptual categories are coming to light, or that no new significant insights are continuing to emerge [Glaser and Strauss 1967, Charmaz 1983].

Each of the interviews was transcribed and subject to qualitative content analysis. The specific approach used is detailed elsewhere [see McKay 1999], but involved categorisation of responses into certain themes, some of which were inherent in the interview questions, and some of which emerged through the interviewees' responses to questions posed. Some nine interviews have been conducted to date. In citing from these transcribed interviews, the convention CY1-CY9 has been adopted (Car Yards 1 – 9) in order to conceal the identity of any specific dealer. Demographic details of the car yards that were represented in the study are listed below in Table 1.

4 Findings of the Research

A number of themes or issues have emerged as a result of the interviews conducted to date. Each of these will be briefly described and discussed below. However, generally speaking, it seems fair to say that the Internet is causing both interest and uncertainty amongst the car dealers. Already, there are some impacts of electronic commerce being felt, such as the reengineering of the industry supply chain (discussed below). However, few of the car dealers feel certain as to how large the impacts of electronic commerce might ultimately be, and few of the businesses seem to be adopting quite deliberate and explicit strategies with respect to electronic commerce. There was generally little evidence of internal changes being made in response to opportunities offered by electronic commerce initiatives.

Table 1: Details of the Car Dealerships in the Study

Car Dealer	Type of Market	No. of Employees	Current EC Activity
CY1	New & used, family vehicles	>20	<ul style="list-style-type: none"> no Web site, but one is planned mention on manufacturer's site
CY2	Used, medium cost, 4WD & family vehicles	<5	<ul style="list-style-type: none"> no web site at present vague plans for some web presence in future
CY3	New & used, family vehicles	5 - 20	<ul style="list-style-type: none"> own Web site, amateurishly presented and maintained plans for redevelopment to more professional level plans to link to manufacturer
CY4	New & used, family vehicles	5 - 20	<ul style="list-style-type: none"> part of electronic mall electronic links to spare parts suppliers & wreckers
CY5	New & used, luxury sports and "image" cars	5 - 20	<ul style="list-style-type: none"> own independent web site planned links to manufacturer planned plans to create virtual community of customers
CY6	New & used, 4WD & family	5 - 20	<ul style="list-style-type: none"> part of electronic mall
CY7	Used, low cost, high mileage "fancy" large cars	<5	<ul style="list-style-type: none"> no web site at present plans for some web presence in future
CY8	New & used, family vehicles	>20	<ul style="list-style-type: none"> part of electronic mall
CY9	Used, lowest cost possible, family vehicles	<5	<ul style="list-style-type: none"> no web site at present vague plans for some web presence in future (family member may develop site at some stage in future)

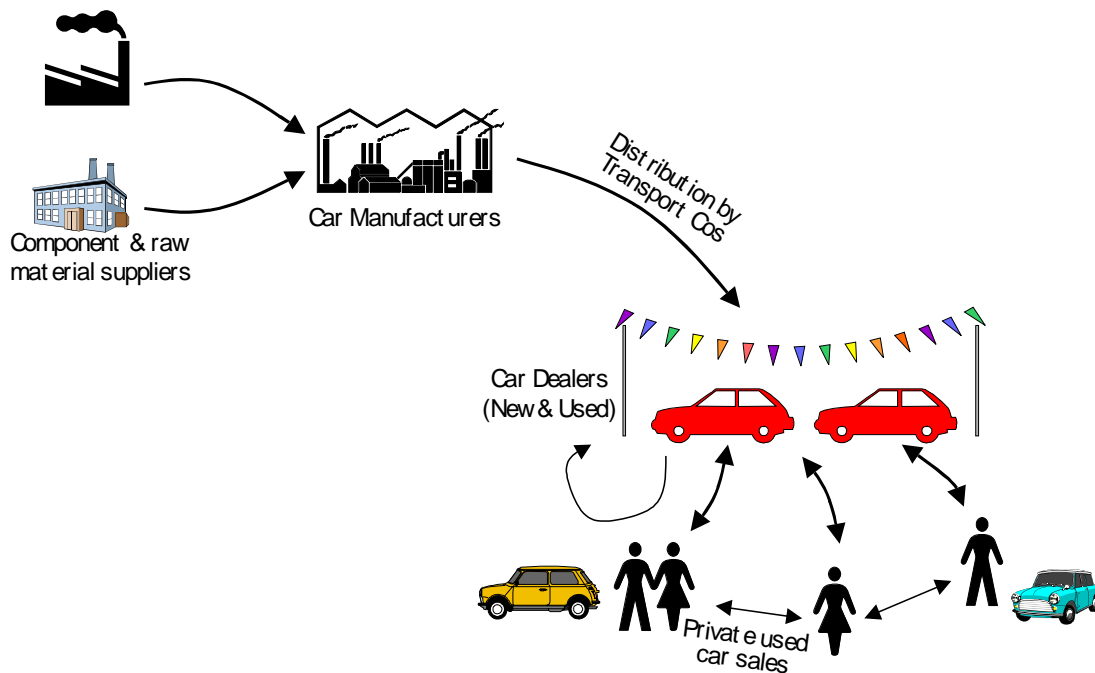


Figure 1: Traditional Car Industry Supply Chain

4.1 Impacts of Electronic Commerce on the Car Industry Supply Chain

The car industry has traditionally relied on a fairly uncomplicated supply chain. Car manufacturers (typically fairly large, prominent organisations) draw raw materials and other component parts from a number of suppliers. Finished new cars are then distributed to a network of car dealers, for on-selling to the end consumer. End consumers may sell used cars back to dealers (perhaps as a trade-in on another car, although not necessarily), or alternatively, may privately organise sales of used cars direct to other end consumers. Figure 1 illustrates these relationships.

Proponents of electronic commerce might argue that, amongst other things, the advent of the Internet in the car industry supply chain may result in disintermediation, the removal of some of the intermediary players in the supply chain [Laudon and Laudon 1999, Choi et al. 1998, Wigand and Benjamin 1995]. Long term this may occur, with new car buyers specifying requirements and purchasing direct from manufacturers. However, current industry activity with respect to electronic commerce (described below more fulsomely) does not indicate that this is occurring to any great extent as yet. Rather, Figure 2 portrays the changes occurring in the industry.

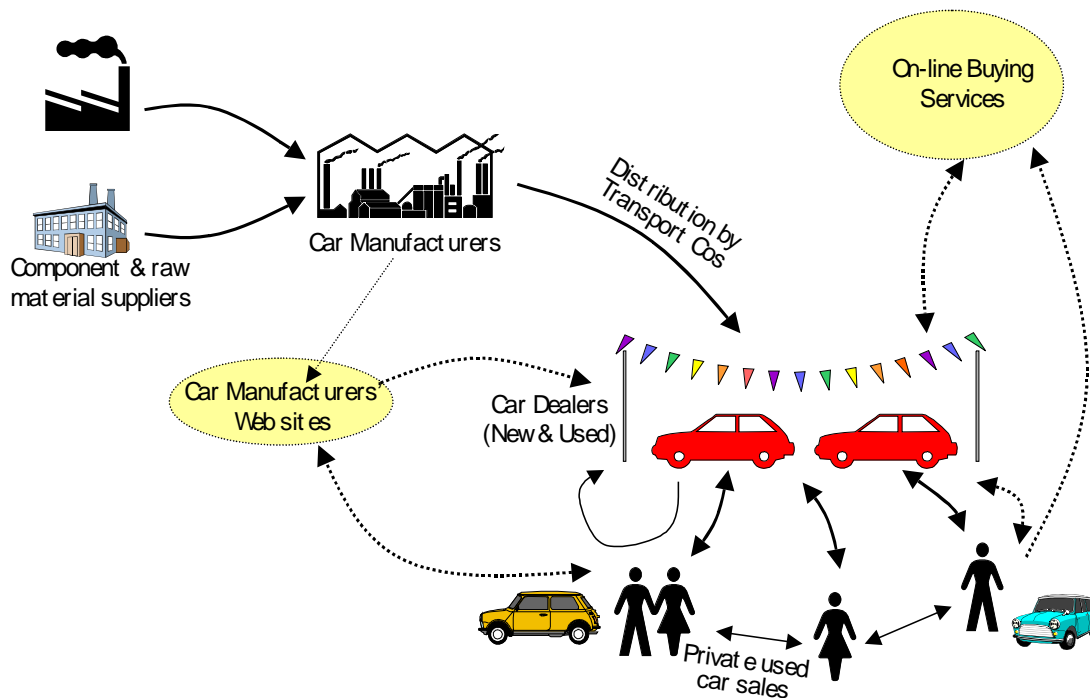


Figure 2: The Effects of Electronic Commerce in the Car Industry

Already in the Australian car retailing industry, electronic commerce has seen the advent of on-line listing and buying services, acting as a conduit of information, referrals and expressions of interest between end consumers and new and used car dealers. Thus dealers register with these on-line buying services, regularly providing updates on the range and features of vehicles they have available for sale. In exchange, the on-line service providers facilitate placing interested customers in touch with the relevant dealer. There are at present three electronic malls or marketplace providers in Australia, although only two of these are operating in Western Australia. These are CarSales Pty Ltd with its Carsales.com.au marketplace, Ninemsn with the Carpoint.com.au marketplace, and John Fairfax Holdings' Drive.com.au marketplace on-line in the east of Australia only at present. Some of the dealers interviewed believed it was necessary to be represented on at least one of these electronic marketplaces.

CY4: "I mean the job of a dealership, I believe is to get customers into the door, once you've got them in the door, hopefully, sales...it [on-line buying services] is very useful, so soon some of us, we will lose some deals" (if they did not become part of the on-line buying service).

Car manufacturers are also developing a presence on the Web, whereby interested end users are directed towards a preferred dealer located close-by [Stair and Reynolds 1999]. While the CEOs interviewed did not envisage the disappearance of the car dealerships as consumers purchased direct from manufacturers, they did concede that they could not be complacent about their role given the influence of the Internet and changes

already occurring in the industry supply chain. Of interest was the fact that some of the car dealers felt pressured by the car manufacturers to establish a web site with links to other sites.

CY3: "Our name's already on all the manufacturer's sites. And our address and email address...and when we finish building our web site, you'll click down to us from the manufacturer...Further to that, there's pressure on us from the manufacturer to have a web site...(And then in response to a question whether the pressure came from a particular manufacturer) Yes. From all of them. From the manufacturers."

CY5: "We're being pushed by the manufacturers to be in there."

4.2 Awareness and Attitudes to Electronic Commerce

The situation regarding the Internet and car retailing in Australia seemed to be one of great uncertainty and some anxiety on the part of the car dealerships. There is some awareness of the U.S. scene and the increasing importance of the Internet in retailing in general and car retailing in particular in that country.

CY4: "But, eh, there is obviously a lot of information in terms of how much business has actually been done on the net, not people just looking, and making predictions that by 2000, America was about 35% signing contracts without actually being done face to face contact."

However, typically, senior executives are informed through their reading of the popular press and through television reports, but none of those interviewed to date have undertaken serious research into electronic commerce. Thus, they seem to know few of the specific trends occurring in the US, and are generally not well-informed as to the growth forecasts for on-line retailing in America. Very few persons in the car retailing industry in Australia are willing to forecast the future role and importance of the Internet in car retailing in Australia, although they generally suspect that it will be significant.

CY8: "We really are nowhere yet with the Internet other than we know it's going to work and it's in the infancy stages. It's already showing positive signs, and we will move towards it pretty quickly. Should be interesting to see in 12 months time reflect and see."

However most of the larger car dealerships, particularly those with annual revenues of greater than \$10 million per year, have an Internet presence now or plan to have one in the near future. The smaller players in the industry are also either established on the Web, or are planning to become so in the foreseeable future. The web presence is usually accomplished through the electronic malls or marketplaces that have become available for car retailing, and which were briefly outlined previously when discussing changes to the car retail industry supply chain.

Overall there is a moderate amount of skepticism about the Internet and its importance in new and used car retailing in Western Australia. Little has happened yet, and there is some feeling that despite some journalistic stories and government reports heralding great changes, little will happen, at least in the short term future.

CY4: "What is happening is that we are getting some initial interest-only enquiries over the Internet...but so far is so small relative to the opening of the site."

But there is great uncertainty also. Interviewees generally acknowledged that electronic commerce and the Internet could become enormously important to their businesses, although they were uncertain as to exactly what impacts it might have, how dramatic these impacts would be, and on how these changes might be realised in their specific businesses. Despite the skepticism, none of the interviewees were willing to completely ignore electronic commerce at the moment: there was always the concern that it might suddenly become very significant, and they did not want to risk being 'left behind'. Interestingly enough, this echoes findings by Reynolds [1997] of the attitudes expressed by some major European retailers.

CY7: "No, no we suspect that we'd better be there."

CY5: "So the whole email thing and Internet is a wild card. This one's from our point of view, but we don't know where the hell it's going."

CY1: "Obviously our business has to be competitive, and we have to keep up with the latest marketing trends...I am only at this stage paying a token gesture I think towards the Internet, we haven't really done it properly."

CY4: *“But in discussion we had, we believe that this sort of generation of people who are leaving school now, in ten years time would be the sorts of people that buy on the Internet.”*

Also, it must be said that many of the dealers wanted to use the Internet to arouse interest, but actually wanted then to handle the transaction face-to-face.

CY2: *“What is happening is that people are searching for products from the Internet...I don’t know whether, or how many people would buy from the Internet, if you’re talking about a commodity like a motor car, I still believe people still want to touch it.”*

CY9: *“I don’t think anyone would spend their money firstly without being able to touch it, see it, and I don’t think we want that way either, because that person is important...”*

CY4: *“The point I was getting to, I don’t think anybody would want to buy used cars without touching it and seeing it.”*

CY8: *“I’m certainly not trying to encourage people to buy a motor car on the Internet. I’m trying to initialise enquiries as a result of finding a car on the Internet...The Internet is very useful to provide interesting useful information...I require enquiries from the Internet, I want then to get face-to-face.”*

It could hardly be asserted that the car dealerships had articulated a clear vision of electronic commerce for their organisation, which they were now pursuing through appropriate strategies. Rather, the articulated strategy was ‘We have to be on the Web, because otherwise we might miss out’.

CY3: *“Jeez, we’ve got to have a bloody web site now before everybody else out there does it.”*

CY4: *“I am computer illiterate, emm...effectively the only decision that I had was to keep it simple. By me bringing the vehicle into stock, my car system automatically goes to the system [the on-line buying service] and then links it straight to the Internet.”*

CY8: *“It has been said time enough that the worst thing you could do is wait until the Internet gets big...it would be so much behind... We might as well get in at an early stage.”*

In terms of the electronic commerce maturity model developed by the Nolan Norton Institute for KPMG, these car dealerships were at the Experimentation Stage or Stage 1 in their adoption and use of electronic commerce (see Figure 3 below) [KPMG 1999]. If they are to migrate to more mature stages, then according to this model, considerable changes will be required. To achieve Stage 2, they will need to develop policies and have more of a deliberate business focus to their web-based activities. Comparatively few of the dealers interviewed seemed to believe that the car industry would ever achieve Stage 3, where transactions are completed on-line, although some thought that the Internet would over time become more and more integrated with their normal business operations.

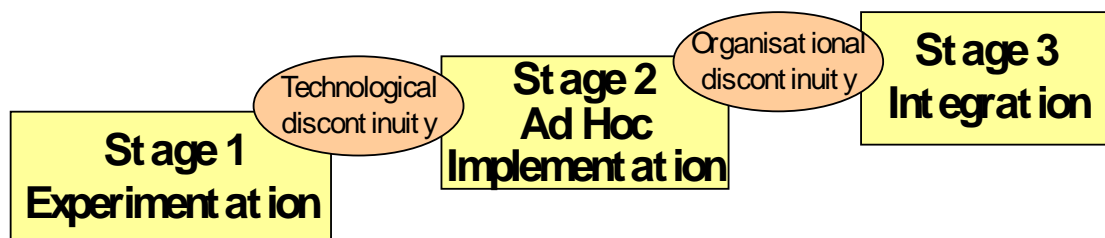


Figure 3: Electronic Commerce Maturity Model

(KPMG 1999: 11)

CY3: (In response to a question about whether he would ever close a deal on the Internet) *No, not that I can see (Not ever?) Well, we have done a couple [of deals] on email queries...So yes, we’ve used email.”*

CY8: *“I suspect there is a strong possibility as we get away from these screens (indicating his PC) to large TV screens at home...which I suspect it’s going to be that the family or the*

partnership...will sit down during tea or after tea, watch the news, and then chuck it on to the Ford site, or the Audi site, or the Lexus site. And they'll look at the car...they'll look at the car doing all sorts of things, press a button and they'll change the colour of the car...and then they may have to go through the manufacturers' to get to your site, and that's how people come to you."

4.3 Effect on Business

All of those interviewed said that there was little effect of the Internet on sales to date and they felt that this would remain the case for the short-term future.

CY4: "New car enquiries...zero June, zero July, zero August, zero September, October to November 7 [enquiries], December zero, January 1 [enquiry]...So its zero, zero, zero..."

The Internet, they felt, would not be a medium over which actual sales would take place, but might be a medium which would influence buyers in terms of which car dealerships that they approached. The actual selling of cars, or at least the end sub-process of selling cars, would thus remain in the hands of the car dealerships' sales persons, but the flow of customers to car dealerships might well in the future be affected by the Internet. Their sentiments very much echoed the trends that were discussed earlier in this paper with respect to the impact of electronic commerce on the American car industry.

CY1: (reporting on a story he had heard about a customer) "...I would never buy a car that way [over the Internet]...I want to smell it!...Computers can not open and shut the doors, I can't smell the trunk, and I can't smell the car..(Responding to a question about whether salespeople would disappear because of the Internet) "I don't see that happening for a long, long time in Australia." (Responding to whether customers decision making would be informed by the Internet) "Yeh, yeh, sure, sure I think in time it will be...I think it will be."

However, a particular point which moderates the comments above needs to be made at this juncture. None of the car yards involved in the interviews to date appeared to have any mechanism to detect whether a customer walking in did so as a result of newspaper advertising, Internet on-line buying services, referral by a satisfied customer, quite serendipitously, and the like. Thus, it appeared that none of these businesses had made any effort to find out whether their customers had conducted an initial search over the Web, and whose approach to the company was thus motivated by information obtained over the Internet. When Peter approached the particular dealership from which he purchased his 'new' second-hand Camry as previously described, the dealer probably remained completely unaware that his approach had been entirely motivated by their listing on Carsales.com.au.

4.4 Impact on Business Processes

Despite each of the car dealerships having web sites, the business processes of each dealership were not well integrated with the web site. It was not always clear in each dealership just how Internet based enquiries were to be dealt with nor exactly who would deal with them. All the car yards had well-established mechanisms for handling new 'walk/phone-in' customer enquiries, but they were somewhat concerned about how equitably, efficiently and effectively to deal with e-mails generated from on-line buying services. Thus, Peter's experience described in the Introduction reflects this issue. It is one thing to enable e-mail links to the organization: it is quite another to design internal business processes to ensure the e-mail is responded to appropriately. Neither did it appear the dealerships were geared up to keep good commercial records of web activity, nor ready to measure important statistics such as look-to-buy ratios. For example, when a question was put to one of the major dealers (CY1) about the internal business processes he had in place to deal with Internet enquiries, this was the response:

CY1: "Can I tell you something that would probably surprise you? I don't know."

CY4: "You've got a job to link the Internet activities to your sales people, something that changes the business a bit, with a lot of stuff made through the Internet...How do you monitor your salespeople, and then reward it?"

4.5 Drivers and Inhibitors of Electronic Commerce

By far the major driver of developing a presence of some sort on the Internet was the fear of being left behind by competitors when (and if) 'something happened'. These business people seemed very concerned not to miss out on a business opportunity should one present itself!

CY8: "It's paramount. Anyone who doesn't get into it [electronic commerce] is bloody mad!"

One of the car dealership interviewees mentioned that their particular dealership had been subject to a vigorous advertising campaign by the Ninemsn and Fairfax groups (previously described) offering a fully maintained web site for approximately \$6 per car advertised. He believed this to be a move by these media organisations to ensure a good share of what was effectively the Internet substitute for new and used car classified advertisements.

The presence of competitor car dealerships on the Internet is not the only factor driving car dealerships to consider a web presence in some form. The dealerships that sell new as well as used cars are under pressure from the automobile manufacturers to have a web-site. This leads to listings of car dealerships on manufacturer's sites. These listings often include some web pages with advertisements for used cars from the dealership. However these alternative web sites are not always linked to the electronic marketplace presence of the dealer, thus illustrating that it is early days yet in the utilisation of the Internet and a well planned coordinated approach to the web has not occurred yet.

By contrast, others expressed suspicion of the concept of on-line buying and Internet-influenced sales, particularly given the fact that the electronic malls or marketplaces that were being establishing were such that each dealer was there as one among a crowd, his/her cars part of a larger pool to be searched by customers. The car dealers interviewed were clearly accustomed to regarding fellow dealers as competitors, and many seemed decidedly uncomfortable at participating in the same on-line buying service as their major rivals. However, they also had enough business acumen to realise that from a customer's perspective, such on-line buying services facilitating cross-dealer searches were an attractive proposition.

CY1: "So, so, I am anti-the Internet because of its over-information in this particular instance of the car business...I don't want anything to do with other Ford dealers or Mitsubishi dealers...I mean...they are my enemy!"

CY9: "I have heard that in the USA, you can find the price that new cars are sold to dealers by the manufacturers on the Internet...I think that's obscene!"

The other major inhibitor to electronic commerce seemed to stem from the difficulty that the senior executives interviewed seemed to be experiencing in evaluating their investment in electronic commerce. Most of these executives were looking for some sort of cost / benefit with respect to their Web and associated investments. However, at this stage, they generally felt that there were few tangible benefits to speak of, and typically, they struggled to appreciate the 'worth' of so-called intangible benefits. This issue certainly contributed to a feeling of uncertainty about the value and impact of the Internet. Nevertheless, none of the dealers interviewed was prepared not to remain totally uninvolved until someone else (one of their competitors!) demonstrated the value of electronic commerce investments by deriving considerable business benefits from the Internet.

CY8: "The cost of advertising is bloody expensive. And at the moment, the majority of used car advertising is in real life...predominantly newspaper...One of the big advantages with the Internet for you is the low cost of actually advertising."

4.6 Web Site Design and Management

Most of the dealers had an ad hoc approach to their web sites. Many talked about feeling pressurised by IT consultants into developing web sites without too much consideration of a planned business initiative to move into electronic commerce. The care and maintenance of the web site was not, in general, professionally planned and managed. In one case, for example, the finance manager had somewhat reluctantly inherited the task of maintaining the web site, without having any apparent great interest or expertise in the area.

CY8: "We've been interviewed by enough web site manufacturers to sink a ship. It's a bit like "You need to get involved in our web site." But once you see the sites, you know...there's room there for someone to say "Give us \$700 and we'll come back next week with your web site." Yeah, Ok. There are con-merchants, yes. There are con-merchants."

It was not always clear what policies and standards had been set for presenting individual cars and the dealership in general on the web. Sometimes a number of cars in the dealership stocks did not appear on the web site. Of those that did appear some had photographs of the car concerned and others did not. There appeared neither rhyme nor reason to these and other aspects of the web advertisements. There seemed to be a much more professional attitude and practice in dealing with conventional media such as newspapers and radio.

4.7 Virtual Community

One of the car dealerships plans do more than just use the Internet as a new channel for classified advertisements. This car dealership sells expensive cars such as Alfa Romeos that it believes form part of a lifestyle for its wealthy clientele. This dealership is planning a web site which will, it hopes, be a focal point of interest for a virtual community of its clients, their friends, and any other persons who share this lifestyle. The web site will feature social events and entertainment that the marketing manager for the dealership believes will be of interest to clients or potential clients. There will be appropriate car reviews, news from Formula 1 racing events, information on quality films, opera, and other cultural events, good food and restaurant guides, and the like. Information will in general, be provided by expert commentators but there will be a place for news and views from the community of customers. The web site will support two-way email so as to enable both information and feedback to flow between the company and its community of clients.

5 Conclusion

The car industry in Western Australia thus remains only superficially affected by the technology and presence of the Internet. Each of the major car dealerships interviewed for this study have web sites, albeit on electronic malls which seem very much like the forerunners of the powerful Internet buying services of the US. Some, again like their US counterparts, have web sites connected to manufacturers' sites. However, their Internet site, detached from the energetic, everyday business of selling cars and making money, is the beginning and end of Internet-based commerce for the car dealerships. Cars are not selling over the Internet, and apparently in the eyes of the car dealers, people's buying behaviour is not being influenced by the Internet.

Thus, after a small burst of activity in establishing a web site so as to be prepared for electronic commerce, all has gone quiet. CEOs and senior managers are back to the main job of selling cars as usual. They are, however, quietly anxious about what might happen next week, in the next year or so, or next decade on the Internet in their industry.

What is needed is some reflective thinking and some action planning with respect to electronic commerce. If the US experience is a guide as to what will happen in Australia, then it would seem timely to plan and enact the reengineering of business processes such that the Internet and associated internal systems are well integrated with the selling processes integral to the business. Included in this will be careful monitoring of web site activity and the establishment of procedures to measure Internet-based referrals and Internet-influenced sales. For example, dealers may need to become familiar with electronic commerce metrics such as look-to-buy ratios, and so on. The new position of the car dealerships to the Internet buying service companies must be thought through as should the other new relationships in the industry supply chain. A time of moderate to significant change is approaching and some strategy formulation together with some IT and electronic commerce supporting strategy formulation would be helpful in charting an appropriate path to the future.

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