Making sense of e-commerce as social action

Marius Janson

College of Business Administration, University of Missouri-St Louis, St Louis, Missouri, USA, and

Dubravka Cecez-Kecmanovic

Faculty of Commerce and Economics, University of New South Wales, Sydney, Australia

Abstract

Purpose – To provide a social-theoretic framework which explains how e-commerce affects social conditions, such as availability of information and equality of access to information, influences actors' behavior, shapes e-commerce business models, and in turn impacts industry structure.

Design/methodology/approach – Empirical investigation based on one-hour interviews with owners/managers of nine vehicle dealerships and six vehicle buyers in a large US metropolitan region. The hermeneutic method of understanding was used, involving a circular process from research design and attentiveness to data, to data collection and interpretation. This circular process exemplified the dialectic relationship between the theoretical framework (derived from Habermas's *Theory of Communicative Action*) and empirical data, through which interpretation and theoretical explanations grounded in the data emerged.

Findings – Demonstrates that e-commerce gives rise to increasing competition among the dealers, decreasing prices and migration of competition to price, decreasing profitability of the average dealer, and erosion of traditional sources of competitive advantage. Moreover, e-commerce emancipates and empowers vehicle purchasers while reducing the power of automobile dealers.

Research limitations/implications – The research findings focus on the effects of e-commerce on the automobile distribution industry. However, one could argue that a number of the findings extend to other retailing-based industries.

Practical implications – The paper illustrates a research methodology that may be useful to study other e-commerce applications.

Originality/value – This paper illustrates the application of Habermas's *Theory of Communicative Action* to studying the effect of e-commerce.

Keywords Electronic commerce, Empowerment, Social behaviour, Social action

Paper type Research paper

1. Introduction

Electronic commerce (e-commerce), which involves commercial transactions between buyers and sellers over the internet, enables a new economic environment and business practices (Napier *et al.*, 2003; Porter, 2001; Turban *et al.*, 2000; Kalakota and Whinston, 1996). The relentless growth of e-commerce is attributed primarily to economic imperatives and advancements in information technology (IT). The research findings show that e-commerce creates significant economic benefits for both sellers and buyers due to availability of information and new online services, access to new markets,

lower transaction costs, increased transaction speed and accuracy, and shorter delivery times. Management and IS literatures embrace e-commerce as the epitome of technologically enabled economic rationality, praise its political neutrality, and laud the economic progress arising from advancements of IT infrastructure (Koch and Cebula, 2002; Siskos, 2002; Weill and Vitale, 2001; Weill and Broadbent, 1998).

However, a more widespread adoption of e-commerce does not necessarily increase profitability; nor does it ensure sustained competitiveness. Porter (2001) warns that companies are struggling to convert e-commerce benefits into profits as e-commerce expands the market geographically, reduces barriers to entry, and increases competition:

> The great paradox of the internet is that its very benefits – making information widely available; reducing the difficulty of purchasing, marketing and distribution; allowing buyers and sellers to find and transact business with one another more easily – also make it more difficult for companies to capture those benefits as profits (Porter, 2001, p. 66).

This paradox is explained by economic argument regarding the internet's impacts on industry structure: buyers, suppliers, competitors, threats of substitute, and barriers to entry (Porter, 2001). For instance, Porter (2001) proposes that the internet shifts bargaining power to end users, increases the number of competitors and reduces differences among them. As a result there is a trend to shift the basis of competition toward price and away from quality of products and services. This is a dangerous trend in any industry which ultimately leads to diminishing profits. Is this an inevitable consequence of e-commerce? How can this trend be explained? While Porter's economic argument helps identify the trend and explain economic motivation behind companies' behavior, it does not explain the underlying mechanisms that instigate particular consequences.

In this paper we argue that in addition to economic motivation we need to examine social conditions of business transactions in order to better understand the impacts of e-commerce on companies, consumers and industries. We therefore propose that research into e-commerce should include not only economic and technological aspects, but also social aspects and their consequences. This paper is specifically concerned with new social conditions emerging in Business-to-Consumer (B2C) e-commerce and the ways they impact buyers' and sellers' relations, their behavior in business transactions, and industry structure. While some general trends are observable across industries, the underlying mechanisms are expected to be industry specific. This paper therefore focuses on a particular industry – vehicle trade – where it examines the impact of e-commerce. The objectives of the paper are: first, to identify the prevailing models of social behavior of actors in vehicle commercial transactions; second, based on this to explain how the changes in social conditions brought about by B2C e-commerce – such as public availability of information and equality of access to information – impact actors, their social behavior and trade practices, and finally, to recognize trends emerging from increasing adoption of e-commerce and the dynamics of change in social behavior of actors so as to explain the consequences for the industry structure.

To study B2C e-commerce social conditions and to achieve the objectives, we propose a social-theoretic framework based on Habermas' *Theory of Communicative Action* (TCA) (1984, 1987, 2001), within which we interpret buyers' and sellers' commercial transactions as social actions (section 2). This framework focuses on

understanding the meanings that buyers and sellers assign to social conditions of commercial transactions, their orientation while taking actions, and the ways they achieve their goals. The adoption of such a framework therefore enables us to draw attention to and examine the changes in actors' social behavior as they experience new economic, technological and social e-commerce conditions – conditions that differ markedly from traditional face-to-face transactions.

To investigate the prevailing model of social behavior and the dynamics of change brought about by e-commerce we conducted multiple case studies of dealers and online vehicle buyers (section 3). Our case studies comprise in-depth interviews with vehicle buyers, dealership executives, and sales people. We also analyzed dealership web sites and studied documents from the National Vehicle Dealer Association (2000) (NADA), Kelley Blue Book (2004), and Edmunds Publications (2004). By interpreting the empirical material within the TCA framework (section 4) we provide insights into emerging modes of social behavior and explain how e-commerce impacts sellers' and buyers' social interactions and power relations, and how it transform vehicle trade practices. These insights enabled us to explain the dynamics of change in social behavior of actors and some broader consequences of the increasing adoption of e-commerce for the industry's structure (section 5). Finally, the paper concludes with a discussion of implications and contributions of the social-theoretic approach to e-commerce and suggestions for future research.

2. Theory of communicative action

Using Habermas's TCA (1984, 1987) to understand e-commerce draws on a long strand of critical information systems (IS) research (Lyytinen and Klein, 1985; Lyytinen, 1986; Lyytinen and Hirschheim, 1988; Hirschheim and Klein, 1989; Lyytinen, 1992; Hirschheim and Klein, 1994; Ngwenyama and Lee, 1997; Cecez-Kecmanovic and Janson, 2000; Cecez-Kecmanovic, 2001). TCA represents a general theory of communication and has been applied to understand social implications of IS development, implementation, and use. It is beyond the scope of this paper to review TCA's applications in the IS field in-depth and, hence, we limit our discussion to a few of TCA's major contributions.

Lyytinen and Klein (1985) were the first to propose Habermas' TCA as a basis for a theory of IS. They envisaged its implications on the ontology and epistemology of IS research, research methodologies and the ethics of IS research (Lyytinen and Klein, 1985, pp. 229-231). Although one could not claim that the application of Habermas' critical theory in IS has been extensive, its influence has been disproportionately significant. First, a Habermasian explanation of information systems as social systems extended the socio-technical view of IS established by Enid Mumford's (1981, 1983) work and soft systems methodology by Checkland (1981). Informed by Habermas, information systems development (ISD) is conceptualized as a form of social action (Hirschheim and Klein, 1989). In addition, critical ISD studies exposed dominant technology-driven ISD methodologies and their underlying instrumental rationality (Lyytinen, 1992; Waring, 1999).

Based on the work of the previous authors Cecez-Kecmanovic (2001) explained the role of IS in the increasing rationalization of organizations – using the broad spectrum of rationalization from instrumental to strategic to communicative (section 2.1). Furthermore, Hirschheim and Klein (1994) proposed extensions to the ISD

methodology ETHICS to achieve "emancipatory ideals", thus putting participation, social empowerment and democratization on the research agenda. Ngwenyama and Lee (1997) applied Habermasian TCA to computer mediated communications (CMC) and discussed the risks of distorted communications and the potential for emancipation of actors from false beliefs and constraints. Empirical studies of CMC, such as email and Intranet, demonstrated how Habermas' TCA can explain the democratizing potential of CMC and specified organizational conditions necessary to realize such potential (Cecez-Kecmanovic and Janson, 2000; Cecez-Kecmanovic, 2001). Finally, in a recent paper Varey *et al.* (2002) adopted TCA to demonstrate the political nature of communication in organizations and the role of IS in the production and distribution of information and knowledge.

Given that Habermas's TCA has not been applied in the context of e-commerce we will briefly introduce some basic concepts and explain their relevance to studying e-commerce. For a more exhaustive treatment of TCA the reader is referred to Habermas's theoretic writings (1984, 1987, 2001), and studies of his work (Geuss, 1981; Wellmer, 1985; Roderick, 1986; White, 1988, 1995; Rasmussen, 1990; Reese-Schäfer, 2001; Koningsveld and Mertens, 1992; Outhwaite, 1996; Cooke, 1998).

2.1 Action types

We speak of social action when human action is purposively oriented and meaningfully related to the behavior of other human actors (Weber, 1964, 1978). First, actions differ depending on the actors' orientation with respect to the goals to be attained. Actors may be oriented solely to *success* in achieving goals or, instead, they may be oriented to *mutual understanding,* achieving their goals by coordinating their actions with other actors. Second, actors refer to different worlds: the *objective world* consists of objects and states of affairs, the *social world* consists of norms and values, and their inner, *subjective world* consists of individual experiences, desires and emotions. Habermas (1984) makes clear that by "social action" he means symbolic expression by which actors achieve their goals by relating to and changing their objective, social, and subjective worlds. Social actions are classified depending on the orientation of actors (to success or to mutual understanding) and their relation to the worlds (Table I). It is of note that actors always relate to the objective world and, hence, actions differ depending on actors' relation to other two worlds, i.e. social and subjective worlds.

"Instrumental action" (Table I) occurs when a success-oriented actor seeks to attain goals by intervening in the objective world using pre-dic-tions drawn from physical or behavioral models (Habermas, 1984, pp. 285-286). The actor thus refers to things such as cars, machines, prices, procedures, plans, or shift schedules. In short, the actor refers to things and people who are perceived to be inanimate objects (e.g., machines, parts, and workers as elements of a production plan, or employees laid off during downsizing). Moreover, the actor seeks to realize his/her goals by selecting and implementing means that are thought to yield optimal results (e.g., maximize profit; minimize costs) under the prevailing conditions.

"Strategic action" (Table I) occurs when a success-oriented actor aims to achieve goals by influencing other actors who are perceived to be rational opponents (Habermas, 1984, pp. 85-86, 285-286). Similar to instrumental action, strategic action is success oriented and takes place in the objective world. For example, by taking into

Action type	Action description
Instrumental action: actors are *oriented to success* and relate only to the objective world consisting of physical facts, states of affairs, and people treated as objects	Actors seek to realize goals in the most efficient manner using predictions based on physical and behavioral models
Strategic action: actors are *oriented to success* and relate only to an objective world consisting of physical facts, states of affairs, and people considered to be opponents	Actors seek to realize goals by influencing other actors who are considered opponents; actors choose an action based on predictions of how the opponent will counteract
Communicative action: actors are *oriented to understanding* and re-late to all three worlds: the objective, social, and subjective	Actors seek to realize their goals by coordinating their individual action plans based on mutual understanding of the situation at hand

Notes: Normatively regulated action and dramaturgical action are not listed in the table because they are not of interest to the paper's topic

Table I.
Social action types

account the customer's expected behavior, a strategically acting salesperson seeks to influence the customer so as to meet his/her sales goals (e.g. increased sales or maximized profit) (Habermas, 1984, pp. 85-86; Koningsveld and Mertens, 1992; Rasmussen, 1990; Roderick, 1986).

"Communicative action" (Table I) is the most complex action type. It describes actors oriented to mutual understanding who aim to achieve their goals by developing an inter-subjective interpretation of a situation as the basis for coordinating individual action plans. An essential feature of acting communicatively to achieve goals is the orientation to developing common understanding which in turn enables cooperation and communicatively reached agreement. This is accomplished by the actors referring to all three worlds; that is, making claims concerning the objective world (that something is/is not the case or true), the social world (that something is/is not right or legitimate), and their individual subjective worlds (that the speaker is/is not sincere) (Habermas, 1984, p. 99, pp. 286-288; Habermas, 1987, pp. 126-129; Rasmussen, 1990).

A key feature of communicative action is the process of raising, questioning and defending validity claims, which takes place at the discursive plane. Through discourse actors deal with objections to validity claims and thereby prevent or overcome communicative breakdowns[1]. To be effective in this regard the discursive process should be rather equitable and relatively free from power distortions. Put differently, actors are more likely to achieve mutual understanding of a situation if the discursive process or argumentation approximates the *ideal speech situation*. The ideal speech situation can be understood as a "counterfactual anticipation we make when we seek mutual understanding" under the conditions of communicative symmetry (Alvesson and Deetz, 2000, p. 91). While it is an "ideal" that can never be achieved, the conditions of the ideal speech situation need to be *sufficiently* satisfied for a successful communicative action[2].

It is of note that the concept of communicative action has been misinterpreted and accused of being naïve and unrealistic. Particularly misleading was an interpretation that considers communicative action as leading to "final" agreement that eliminates different interests, views and values (Wilson, 1997). Such interpretation has no basis in Habermas's TCA and contradicts the definition and numerous explanations by

Habermas (1984) and other authors (Cooke, 1998; Koningsveld and Mertens, 1992; Rasmussen, 1990; Roderick, 1986). The model of communicative action, as defined by Habermas (1984), assumes that actors have different interests, views and values and can take actions to achieve their different or even opposing goals. However, communicative action differs from other action types in that actors try to achieve their goals in a cooperative manner by developing a shared understanding of the situation in hand. A communicatively achieved agreement, therefore, is always fragile and subject to continuous revision. It survives as long as all actors accept the validity claims on which it is based and are reasonably satisfied regarding the achievement of their goals. Any actor can call into question the basis of the agreement if he/she can demonstrate falsehood of facts about the objective world, (e.g. incorrect financial statements), or illegality of deeds (e.g. breach of law) or insincerity of participants (e.g. deceptive intentions) that compromise the agreement. As Habermas explains, "stability and absence of ambiguity are rather the exception in the communicative practice of everyday life" (1984, p. 100).

The meaning of and the difference between actions oriented to success (instrumental and strategic actions) and actions oriented to understanding (communicative actions), as defined by Habermas (1984), will be further explained in the context of e-commerce.

2.2 E-commerce as social interaction

Commercial transactions are conducted by buyers and sellers who typically aim to achieve conflicting goals. Sellers take actions to attract buyers and sell their products at the highest possible price. Similarly, buyers take actions to find and purchase the most suitable/desirable product at the lowest price. To achieve their goals, however, buyers and sellers may adopt different orientations. They may be exclusively concerned with achieving their goals (orientation to success), or they may attempt to develop a shared interpretation of a situation with other actors so as to coordinate their actions (orientation to understanding). These basic distinctions indicate whether the buyers and sellers involved in e-commerce transactions act instrumentally/strategically (success oriented) or communicatively (understanding oriented). These distinctions, as explained above, further imply different types of action.

Axelsson *et al.*(2002) suggest that commercial transactions usually include several phases that occur in a social space comprising producers, markets, brokers, sellers, buyers, regulators and regulations, cultures (e.g. industry culture), etc. First, a buyer has a need (e.g., transportation) whereas a seller has the ability to meet the need (e.g. sell a vehicle). After establishing contact the buyer and seller exchange offers and counter offers until both parties are satisfied. Second, the buyer and seller draw up a delivery and payment contract that is mutually binding. Third, contract fulfillment results in the product or service delivery by the seller and payment by the buyer. Finally, both the buyer and seller complete the business transaction by assessing their satisfaction level. Under traditional vehicle selling conditions such commercial transactions were typically completed during face-to-face social interaction between the seller and the buyer. The conduct of a traditional commercial transaction through face-to-face interaction in a particular social, legal, cultural and organizational environment is symbolically presented in Figure 1.
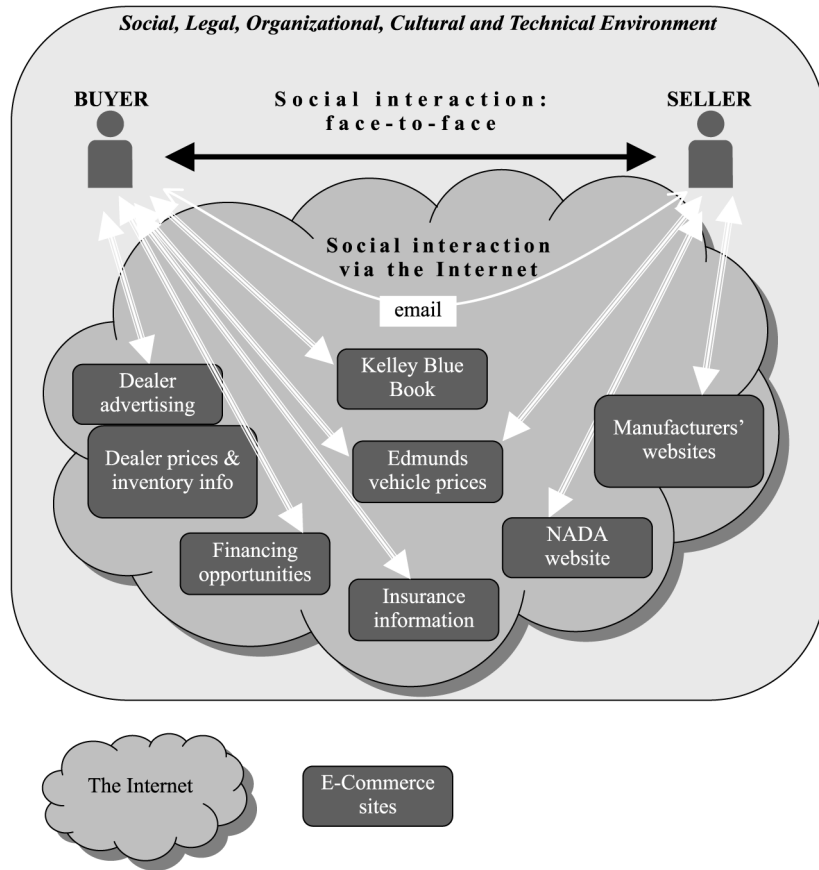
Social, Legal, Organizational, and Cultural Environment

BUYER   Social interaction: SELLER
                         face-to-face

(Investigation of products; testing; offers
and counter-offers; negotiation and signing
of a contract; contract fulfillment –
payment and delivery; assessment of
transaction)

Figure 1.
Commercial transactions
as face-to-face social
interaction

In the vehicle distribution industry conflict between buyer and seller is particularly virulent (Phillips, 2001). The salesperson's income is normally based on monthly sales and net profit. Hence, the salesperson is motivated to obtain as high a price as possible for the vehicle. On the other hand, the buyer is faced with a decision characterized by a high degree of uncertainty and significant financial implications. We point out that the aforementioned situation remains unchanged after the introduction of e-commerce. However, the conditions under which the commercial transactions take place and the ways they are executed do change.

E-commerce constitutes a new channel for interaction between buyers and sellers (Figure 2). E-commerce has made it more convenient for buyers to investigate alternative options and to reach an informed decision. For example, dealer invoice prices are available on the web sites of Edmunds Publications (2004) and Kelley Blue Book (2004)[3]. Today many dealers post new and used vehicle prices on their web sites and offer internet features that include financing options, interest rates, monthly payment calculations, insurance packages, and vehicle availability. Customers may also book service appointments on the web site (Greenspan, 2003). Potential buyers use these features to select options such as vehicle model, color, accessories, and price[4]. It is frequently possible for buyers to obtain an exact price for their chosen vehicle, obtain financing, arrange for insurance, and purchase the vehicle through the internet and only then visit the dealership to take possession of the vehicle.

E-commerce broadens the scope of commercial transactions: both buyers and sellers can obtain comprehensive product and market information and a wide range of services via the internet. The interesting question is how and in which ways e-commerce conditions impact the social behavior of buyers and sellers. We examine these questions by analyzing personal experiences of vehicle buyers and sellers drawn from case studies presented in the next section.

3. Case studies of e-commerce vehicle sales
3.1 Research method
To better understand new social conditions arising from e-commerce and explain how they affect the social behavior of buyers and sellers and their power relations, we used a multi-case interpretive study of vehicle selling and buying processes. The nature of our study was determined by the hermeneutic route to understanding that involved an

Social, Legal, Organizational, Cultural and Technical Environment

BUYER   **S o c i a l   i n t e r a c t i o n :
f a c e - t o - f a c e**   **SELLER**

**S o c i a l   i n t e r a c t i o n
v i a   t h e   I n t e r n e t**

email

Dealer
advertising

Kelley Blue
Book

Manufacturers'
websites

Dealer prices &
inventory info

Edmunds
vehicle prices

Financing
opportunities

NADA
website

Insurance
information

The Internet

E-Commerce
sites

Figure 2.
Buying a car as social
interaction: face-to-face
and internet-enabled
interaction

ongoing circular process from Habermas's theoretical framework (presented in section 2) that shaped research design and attentiveness to data, to data collection and interpretation, which in turn grounded the theoretical explanation of changes in actors' behavior emerging in e-commerce social conditions. Such a circular process exemplified the dialectic relationship between the theoretical framework and empirical data, through which interpretation and theoretical explanations grounded in the data emerged (Ezzy, 2002; Patton, 1990).

The empirical investigation, conducted from 2001 to 2003, involved nine vehicle dealerships and six vehicle buyers in the St. Louis, Missouri, metropolitan region. These dealerships covered the entire range of the market (Table II). The investigation included visits to dealerships, observation of sales processes, and one-hour onsite semi-structured interviews with dealers, chief executives, and sales people. The interviews focused on sales practices and experiences before and after the internet as well as their interpretation of changes emerging as a consequence of e-commerce. The interviews enabled the interviewees to raise topics of their interest and express views regarding e-commerce implications for their business. To make sense of their

Table II. Vehicle dealers in the St. Louis metropolitan area

Dealer name	Brands sold	Number of sites	Person(s) interviewed	2004 Annual sales (units) New	Old	Total	Approximate average car price in 2004[a]
1. Your Dealer	Buick, Chevrolet, Dodge, Ford, Kia, Mazda, Mitsubishi, Nissan, Oldsmobile, Saturn, Subaru, Toyota Buick, Ford, GMC, Kia, Lincoln, Suzuki.	18	General Manager, Sales Manager	11,101	10,814	21,915	$30,000
2. Dave Dealer Central	Oldsmobile, Suzuki. BMW, Buick, Ford, GMC, Hyundai, Nissan, Pontiac, Saab, Volvo,	7	General Manager	3,514	3,582	7,095	$30,000
3. Plaza	Volkswagen.	2	General Manager, Sales Manager	5,039	5,332	10,371	$30,000
4. Bo Brand Chevrolet	Ford	1	Owner and Manager	1,425	870	2,295	$30,000
5. Best Classic	Chevrolet	1	General Manager, Inventory Manager, IT Manager	3,940	2,825	6,765	$30,000
6. Style	Chevrolet, Pontiac, Oldsmobile Audi, BMW, Cadillac, Infinity, Land	1	Owner and Manager	426	645	1,071	$30,000
7. Prestige Luxury	Rover, Lexus, Mercedes, Porsche. Aston Martin, Cadillac, Jaguar, Jeep,	1	eCommerce Manager	3,702	3,132	6,834	$80,000
8. Plaza Best	Nissan, Pontiac	1	Sales Manager	2,533	2,606	5,139	$80,000
9. Imports	Mercedes	1	Owner and Manager	638	649	1,287	$80,000

Note: [a] Estimate based on interview data

experiences and the meanings they assigned to the impacts of e-commerce, we also studied dealership web sites and on-line interactions with buyers. Furthermore we explored the broader e-commerce vehicle industry, including NADA's web site and consumer services such as Edmunds and Kelley Blue Book web sites. The Edmunds web site presented an insightful document drawn from the experiences of an undercover journalist who worked as a salesman in several dealerships (Phillips, 2001). His diary provides valuable insider knowledge of traditional face-to-face vehicle purchase processes and dealers' cultures, goals, practices and attitudes.

In addition to dealerships we specifically targeted e-commerce vehicle buyers in order to gain access to their authentic experiences. We interviewed six e-commerce vehicle buyers: four selected from the general population and two part-time graduate students (see Table III). These interviews were conducted in person or by telephone. We asked the buyers to reflect on their experiences with purchasing a vehicle in a traditional way by visiting dealerships versus on-line using the internet. We asked the buyers to explain why they chose to search the internet, visit dealers' and manufacturers' web sites, and consult third party web sites (such as Edmunds and Kelly Blue Book). Of particular interest was the buyers' ability to find, interpret and meaningfully use information provided on various web sites. We also prompted them to reflect on their power position *vis-à-vis* salespersons and their feelings regarding the purchasing process.

The collected empirical evidence includes 15 audio-taped and transcribed interviews with sellers and buyers, notes from researcher's observations at the dealerships, transcripts of email interactions between sellers and buyers, notes regarding dealers' web sites, the NADA web site, Edmunds and Kelly Blue Book web sites, and NADA documents. It is important to emphasize that the analysis of these data began during their collection, as is often the case with qualitative research (Ezzy, 2002). Namely, as we visited dealerships and their web sites and conducted interviews with sellers and buyers, we sought to make sense of the vehicle trade practices and uncover the meanings actors ascribed to them. Making sense of and interpreting experiences and actions of our subjects allowed themes to emerge (e.g., sellers' resistance to e-commerce, buyers' frustration with dealers and traditional vehicle purchase methods), which often triggered additional questions. Although our empirical study was informed by the Habermasian framework that initially focused our attention on the behavior of actors and social conditions in commercial transactions, we had no preconceptions regarding the changes following the introduction of e-commerce and the implications for actors. We therefore were open to new issues and new themes which then informed further data collection[5].

The data analysis process – during and after data collection – aimed at gaining insights into changing social conditions (apart from economic) and their impact on the behavior of actors as e-commerce replaces traditional vehicle trade processes. Our objectives were to understand and provide a theoretical explanation of the observed changes in trade practices, sellers' and buyers' behavior, and their power relations. Such analysis was basically concerned with the meanings that actors (buyers and sellers) assign to commercial transactions and the ways they construct their experiences with the new economic, technological and social e-commerce conditions.

It was therefore important to understand the broader cultural and social context of the vehicle trade industry within which sellers and buyers interpret situations,

	Reason for using internet	Information obtained from the dealer's web site	Information obtained from third party web sites	Communication between customer/salesperson	Price paid	internet buying experience	Salesperson characteristics	Customer opinion concerning the internet and its future
Mark	"Don't like dealing with salespeople." "Wanted a special car." Customer lives seventy miles outside St. Louis	Car availability Manufacturer's Suggested retail price Car invoice price	Car invoice price [$21,500.00] Manufacturer's suggested retail price [$24,200.00] Understood the "dealer holdback" concept	Customer visited web sites of several dealers. Customer emailed intention to buy the car to just one dealer. internet salesperson contacted the customer by phone the next day. Sale of the car consummated in two phone conversations	Customer bought the car for $19,900	"Really the best experience buying a car I ever had." "It did not waste my time; it did not waste their time. . . . [salesperson] did not play games." "No I did not [test drive the car before buying it]"	"[internet salespersons] are generally younger people." "He [internet salesperson] maintained the web site." "You could tell the regular salespeople did not like that [i.e. internet sales]"	"It will gradually capture a much larger market share. . . [Dealers will continue] to get their share of people who want their hand held through the whole [buying] process"
Shidu	"We started researching on the internet, then. . .we went [to dealers] and the prices [they] quoted were at least $800 more than what we were getting on the internet. [We] decided to do the whole thing on the internet"	Car availability and options from four dealers. Manufacturer's Suggested retail price from all four dealers	Edmunds, Kelly Blue Book, and Cars Direct provided the names of five car dealers in the St. Louis area and emailed the dealers with the customer's car needs. All five dealers failed to contact the customer. The three third parties provided the car's true market value and manufacturer's suggested retail price	Customer emailed five dealers requesting price quotes for the car of his choice. Price spread among the five dealers was $600. The ultimate car sales price was arrived at after several dealer-to-customer emails	Customer bought the car from the dealer who quoted lowest price ($14,900)	"Going through the internet was really smooth. We knew the car we wanted. We did not really have to go [for] a test drive. The total thing [visiting the dealer to pay for and obtain the car] took less than one hour"	"Our interface with the dealership was like you are interfacing with the IT guy. It [the car purchase] was totally hassle-free. Most people [salespersons] running the internet operation are the people that [manage] the [dealer's] computer system. He is basically not a salesperson. [They] are undergraduates with an IT major"	"[The IT person] tells me that more and more people are coming this route"

(continued)

Table III.
E-commerce car buyers'
case studies

	Reason for using internet	Information obtained from the dealer's web site	Information obtained from third party web sites	Communication between customer/salesperson	Price paid	internet buying experience	Salesperson characteristics	Customer opinion concerning the internet and its future
Steven	"Visiting dealerships is very intimidating. When the customer enters the showroom he more or less steps in a pool of sharks...The internet makes it unnecessary for the buyer to interact with the sales person in this intimidating environment and avoids the need of an onsite visit to multiple dealers"	Customer did not specifically address this topic	Edmunds provided the names of several Mazda dealers in the St. Louis area and emailed these dealers with the customer's car needs simultaneously, specifying that the customer wanted to be contacted only by email. Edmunds provided the car's true market value and manufacturer's suggested retail price	Three to four dealers phoned despite the customer's wishes to be contacted only by email. One dealer emailed standard letters. One dealer emailed the customer the car's availability, options, price, and offered a 0% car financing loan. The customer then visited the dealership and purchased the car	Not disclosed	"The customer holds the power and it is all about information. [An internet buyer] who really does the homework evens the playing field and puts him/her in a more powerful position than before the internet existed"	Salespersons don't like the internet. The salesperson serving this customer had more or less "gotten stuck" with selling cars on the internet	"The internet should make it possible to complete the entire car buying process online. That would leave only the need to perhaps test drive the car and have it delivered to the customer's home"
Jonathan	The customer stated that his son needed a used car. Father and son used the internet to research the types of cars available at various dealerships as well as car maintenance history	Dealer vehicle inventory and price. Manufacturer car information and recall history	"Kelley Bluebook provides evaluations and gives you the price you can expect to pay [when you buy] from a private individual [compared] to what you would pay at the dealer. [We] went to the internet to check on [vehicle maintenance] record and on how well it [tends] to hold up"	"We did not exchange emails with the dealer. I don't want to give them [the dealer] my email address because I think they may sell my [email] address and I'll end up with too much junk email." Father and son visited dealerships and negotiated with salespeople in a face-to-face manner	Not disclosed	"I feel more comfortable buying a vehicle [using the internet]...You get access to all kinds of information that ordinarily you would not... [The internet] puts you on a level playing field..."	"Car salespersons have become more professional on account of the internet. They [car salespeople] have to learn to play along or otherwise they are doomed to disappear"	"I think the dealers hate [the internet]. The internet is a great equalizer and [it] has become the IT negotiator"

(continued)

Table III.

	Reason for using internet	Information obtained from the dealer's web site	Information obtained from third party web sites	Communication between customer/salesperson	Price paid	internet buying experience	Salesperson characteristics	Customer opinion concerning the internet and its future
Pradip	"He needed to buy a used car so he used the internet to be informed as best as possible to negotiate a good car purchase price. The internet served as an information source only. The customer did not use the internet or email to negotiate with the salesperson	Car availability, used car mileage and conditions, dealer inventory, and car prices from several dealers	"Kelley Blue Book gives two prices, one is when you are buying [the car] from a private party and the [second price] if you are buying from a dealer. Edmunds gives three price ranges – if you are trading [the car] in [to a dealer then the price will be this much; if you are buying it from the dealer [it will be this price]"	"I did not email [any] dealers because we were searching in the local [St. Louis] area. We prefer to talk to the dealer on the phone." Customer and salesperson interacted face-to-face at the dealership	Not disclosed	"On the internet the [car] price is very transparent. And from that baseline we can start bargaining because on the internet we can search the [car's] price…We [from India] feel more comfortable negotiating than many Americans do"	"Salesperson was very friendly. Actually he said he could not do much but every time we asked to negotiate he went to a senior person and he tried to help us"	"Because of the internet the buyers stay so current that nobody can cheat them. They can always negotiate [with the salesperson by saying] I can buy it from a private party for $1,000.00 less so why should I buy from you?"
Barry	"My biggest motivation was I can't stand car salesmen…I just really don't have good experience with [traditional] salesmen…don't enjoy the phoniness and the banter they try to create…" "I have a lot of experience using the internet"	Searching for a particular car and within a region. The customer checked the inventory and car prices, even put hold on a car of his choice	From Kelley Blue Book and other publicly available sources the customer got invoice prices, suggested manufacturers' retail prices, hold backs, car ratings, actual purchase prices, etc	"[After the dealers responded] I went out and bid the car [via email…[in a day] I had three bids in my hand…all were below invoice price…I went back to the dealer that had exactly the car I wanted and asked [via email] whether they'd match the lowest bid and they said yes"	$27,000 ($350 below invoice price)	"Literally they got the car ready [in an hour] and I was there at 10:30 and…on the road by 11:15. It was the fastest delivery I ever had on a car in my entire life." "The biggest difference was time…It was very straight forward and professional"	"I've found the internet salesperson…got a certain level they can sell a car for and it was very easy to get from them. They didn't beat around the bush"	"So the push [by traditional salesman] to close the transaction is definitely there and I feel the internet allows you to take away some of the intimidation." The customer expects a more intelligent car salesman, more interested in meeting the customer needs than in closing the transaction in the future

Table III.

construct their meanings and take actions. Consequently data analysis and interpretation unfolded along the hermeneutic circle or spiral, moving between the local conditions and subjective accounts by vehicle sellers and buyers and the industry culture, values and norms as revealed by the NADA web site and documents[6]. For instance, better understanding of vehicle dealers' traditions and cultures helped our understanding of dealers' behavior, i.e. how and why they justified deceiving and tricking buyers. Similarly, better understanding of vehicle selling practices, the economic environment, and dealers' attitudes and values (adopted through training and practice) enabled better understanding of vehicle buyers' frustration and intimidation during the traditional buying process and buyers' motivation to use the internet. Understanding individual actors' behavior and specific selling processes (traditional and e-commerce) in turn contributed to understanding the changes emerging in the industry.

Habermas's TCA theoretical framework played an important role in hermeneutic engagement with concrete sales practices on the one hand and the industry tradition and culture on the other. As a theoretical lens the TCA framework served to focus attention, interrogate, compare, and interpret empirical data, which provided the basis for a theoretical explanation of the changes in the social behavior of e-commerce vehicle sellers and buyers.. This relates to the principle of abstraction and generalization (Klein and Myers, 1999) which involves relating details of a particular case to theoretical, general concepts that describe the nature of human understanding and social action, a key feature of the interpretive case study. First, the TCA framework focused our attention on social conditions of trade processes in which actors perform social actions to achieve their goals – dealers aim to sell vehicles at the highest price, whereas buyers aim to buy at the lowest price. Dealers' and buyers' attitudes and their capacity to take meaningful action and succeed in achieving goals depended on their understanding of the market and their ability to access and interpret information relevant for their sell or buy action, respectively.

Second, by examining sellers' and buyers' orientation (to success vs. to understanding) and their relation to the worlds during the purchasing processes (e.g., car features and prices in the actors' objective world; contracts, norms and rules in their social world; and desires, preferences and feelings that belong to their subjective world) we interpreted their trading behavior as a particular type of social action (presented later in this section). For instance, the behavior of success oriented dealers was interpreted as strategic actions if they treated buyers as opponents and achieved their goals by influencing buyers' interpretation of a situation and ultimately their decision to buy. Interpreting such behavior as strategic actions enabled us to understand changes arising on account of e-commerce. That is to say, because of access to relevant information buyers became equipped to counteract dealers' claims and to take successful strategic action themselves (i.e. achieving goals by influencing dealers). Hence we were able to interpret how changing social conditions arising from e-commerce impacted the capacity of buyers and dealers to act strategically which in turn led to a theoretical explanation of changes in their respective power positions.

Third, such interpretation of the behavior of dealers and buyers in terms of Habermas's framework was then compared with the industry analysis in NADA's documents, which provided new insights into the dynamics of change and trends in vehicle trade practices. This in turn led to a more refined interpretation of actors'

behavior and a more broadly grounded theoretical explanation of changing trade practices that are emerging from e-commerce (section 4).

3.2 E-commerce vehicle sales
Figure 2 shows the essential components of online vehicle buying, which usually involves a mixture of face-to-face and internet-mediated social interaction. The thick arrow connecting the buyer-dealer pair depicts face-to-face social interaction: the buyer visiting dealers, roadtesting vehicles, signing documents, and picking up a vehicle after purchase. The internet provides additional communication channels: the thin white arrow depicts the buyer's and seller's email exchanges; other white arrows from dealer to internet represent maintenance of the dealer's web site and investigation of other web sites. Arrows emanating from the buyer represent searches of dealers' web sites, Edmonds and Kelly Blue Book web sites, the NADA web site, and so forth. These internet-based social interactions enable and support significantly more comprehensive, complex and rich buyer-seller communications, the implications of which are not yet well understood.

An obvious change arising from e-commerce is the very process of buying. Vehicles constitute a multi-attribute good and acquiring a vehicle necessitates collecting a large body of information before a customer can make a well-informed purchasing decision (Cooper, 2001). The traditional market structure was based on territorial exclusion determined by US franchising laws, which increased customer transaction cost[7]. First, most dealerships represented a limited number of manufacturers, thus making difficult side-by-side comparisons of alternative brands. Second, because customers were reluctant to rely on pricing figures supplied by sales people, they were motivated to acquire information from Edmunds or Kelley Blue Book. However, customers faced significant transaction costs because traditionally information acquisition required purchasing manuals followed by lengthy and laborious searches of these manuals (Brynjolfsson and Smith, 2000; Cooper, 2001).

Furthermore, as Verboven (1999) observed, dealers made price comparisons between brands needlessly complex so as to get prospective customers to visit the showroom. Before the advent of e-commerce dealers would not give potential buyers prices by phone but insisted that customers visit their showroom where salespeople would then welcome them. In short, many customers lacked the information needed to make informed decisions. A representative of a St. Louis dealer (Dave Dealer[8], September 2000) stated:

> [New] cars had sticker prices but trucks did not[9]. Dealers could mark up a truck whatever way they wanted. The consumer was helpless. We have got the internet now and they [customers] have more information and they tell us down to the penny [dealer's invoice price]. The internet helps [the customer] but it does not help the dealer.

Before the internet, visits to a dealer's showrooms could take several hours. This process was repeated when customers wanted to obtain price comparisons by consulting other dealerships. In short, as several dealers and buyers confirmed, customers tended to buy from the first dealer whose showroom they visited.

E-commerce has changed the vehicle selling process in many ways. Many dealers post new and used vehicle prices on their internet site. Buyers can consult the dealer's web site to check whether the vehicle of their choice is in stock. Many dealers offer additional internet services that include insurance, financing, loan interest rate,

payback period, and monthly payment calculations. Buyers can visit manufacturers' and third party web sites such as Edmonds and Kelly Blue Book, to acquire a wide range of information about the new and used vehicles. Apart from availability and easy access to a wide range of information relevant to purchasing a vehicle, buyers get support for price comparison, locating the dealers that have the vehicle of their choice and establishing email connection with the dealers. E-commerce enables buyers to complete a large part of the purchasing process via the internet. As more buyers use the internet and its services for purchasing a vehicle, their social interaction with sellers is less face-to-face and becomes more electronically mediated (see Figure 2).

We mentioned earlier that the traditional automobile dealers had a strategic advantage *vis-à-vis* the customer by impeding information flow and thus making the car buying process needless complex. As Roszak (1997) points out that it is also possible to overwhelm potential customers by glutting them with a large volume web site-based information. In short, an automobile dealer might be tempted to continue past behavior and present potential customers with confusing and deceptive web sites. However, if an automobile dealer does not feature a well designed or a confusing web site the buyer is likely to switch to the web site of a competing dealership (Johnson *et al.*, 2004).

Consequently, as the empirical evidence indicates, social conditions for vehicle trade and the positions of all actors involved have significantly changed. Yet it is unclear how actors themselves understand these changes and how they interpret their personal experiences with e-commerce. By drawing on our case studies involving dealers and e-commerce vehicle buyers, we explore the meanings they assign to their personal experiences and interpret their actions in light of Habermas's TCA.

3.3 E-commerce and instrumental action

The buyers we interviewed described the traditional salesmen's performance as deceptive and had felt uncomfortable during their past purchases. A buyer's major motivation to use the internet is to avoid deceitful, dishonest and intimidating sales practices. The internet enables buyers to avoid interacting with salespersons as much as possible while purchasing a vehicle at a fair price. This opinion is expressed by three buyers:

> Visiting dealerships is very intimidating. When the customer enters the showroom he more or less steps in a pool of sharks ... The internet makes it unnecessary for the buyer to interact with the sales person in this intimidating environment and avoids the need of an onsite visit to multiple dealers (Steven).

> My biggest motivation [for using the internet] was I can't stand car salesmen ... I just really don't have [a] good experience with [traditional] salesmen...don't enjoy the phoniness and the banter they try to create ... " (Barry).

> We started researching on the internet, then...we went [to dealers] and the prices [they] quoted were at least $800 more than what we were getting on the internet. [We] decided to do the whole thing on the internet (Shidu).

These findings concur with Morton *et al.* (2001) who found that customers actively dislike contact with dealerships in general and with salespeople in particular. Our findings confirm that these negative experiences and emotions are an important motivating force toward on-line vehicle retailing.

By accessing Edmunds' web site Steven found dealers that had the car he wanted and he selected the best offer emailed to him by dealers. Similarly, Shidu bought a car from the dealer who quoted (by email) the lowest price. Neither of them engaged in face-to-face negotiations with dealers but instead made their buying decision based on information gleaned from the internet and subsequent emails from the dealers. At the end both buyers visited the dealer to complete the purchase at the agreed upon price by signing the necessary documents. Both were satisfied with the purchasing process via the internet. According to their interpretation, they avoided personal contacts with salesmen and sidestepped intimidating situations. They also saved time and purchased a car at the lowest price (judging from the available internet information). As Shidu explains:

> Going through the internet was really smooth. We knew the car we wanted. We did not really have to go [for] a test drive. The total thing [visiting the dealer to pay for and obtain the car] took less than one hour (Shidu).

Purchasing decisions by buyers such as Shidu and Steven are interpreted as instrumental actions. First, they obtained much of the information necessary to make informed purchasing decisions from "inanimate" databases via the internet as opposed to social interaction. Second, during the purchasing process buyers exchanged emails with dealers (requests and responses) without engaging in a face-to-face social relationship. Third, they both referred to the objective world only (e.g. vehicle type and features, prices, purchasing and financing conditions, delivery options, and so on). Even when these buyers referred to dealers they considered them part of the objective world and not as actors with whom they had a social relationship. Within the TCA framework, Shidu's and Steven's actions – searching purchasing options by product characteristics on the internet and making a decision solely based on information collected and calculation of the best deal (e.g., price/performance, delivery and financing conditions) – can best be described as instrumental action.

Viewed from a dealer's perspective, however, e-commerce brought a new breed of buyer – the internet buyer – to whom dealers have had to learn to respond. The Prestige dealership manager whom we interviewed emphasized that internet buyers are typically educated, technically savvy and well informed. Such buyers want a different purchasing process that enables coming to the dealership only to pick up the vehicle they purchased:

> They are comfortable getting their information online. You know, reading reports, looking at pictures online and deciding that way if they like the car or not. They want to come in and drive it to maybe just reassure themselves that they like it and then they are ready to proceed . . . Some of them are very specific and in fact some of them do not want to be called. They only want contact through email. We will do the whole thing through email (Manager, Prestige dealership).

It is interesting to note that most dealers do not like on-line sales, but realize that they cannot ignore this sales channel:

> . . . We saw it as a growth opportunity . . . as the internet and email provide another form of communication . . . You had to have it and if you didn't have it, it would be like having a business in the 60s or 70s and you didn't have telephones. You'd get run over (Manager, Prestige dealership).

For many dealerships, selling on the internet is still a marginal activity. Traditional salespeople do not have the required IT skills, and most "don't like the internet." Thus, dealerships often assign on-line sales to IT personnel. The buyers we interviewed confirmed this fact:

> Our interface with the dealership was like you are interfacing with the Information Technology guy. It [the car purchase] was totally hassle-free. Most people [salespersons] running the internet operation are the people that [manage] the [dealer's] computer system. He is basically not a salesperson. [They] basically are undergraduates with an IT major (Shidu).

> [Internet salespersons] are generally younger people. He [the internet salesperson he interacted with] maintained the web site (Mark).

From buyers' experiences and dealers' interviews dealerships seem not yet prepared for on-line sale.

In summary, completing the entire vehicle purchasing process using the internet is a form of instrumental action that has become feasible at many dealerships. This option is particularly attractive for buyers who dislike face-to-face contact with salespeople. By using electronic forms of communication and by visiting e-commerce sites buyers can collect information and calculate their best options, thus achieving their goal without establishing a face-to-face social relationship with dealers.

3.4. E-commerce and strategic action

Actors oriented to success – buyers aiming to purchase at the lowest price and sellers trying to sell at the highest price – who use the internet to search for information in order to influence one another and negotiate the best deal, can be seen as taking strategic actions mediated by e-commerce. The use and benefits of e-commerce in this case are therefore perceived from two opposing points of view. Most dealers whom we interviewed claimed that e-commerce primarily benefits buyers because it has led to a reduction in prices[10]. Many dealers emphasized that e-commerce enables buyers to get relevant information and, hence, to "bargain for and get a better deal," which ultimately negatively impacts the dealer's profit. From the buyer's perspective, however, the most important implication of e-commerce is an equalizing of power position *vis-à-vis* dealers. The buyers we interviewed emphasized that the internet "evens the playing field" and reduces the dealer's opportunity for deceiving buyers. On the other hand, dealers benefit from e-commerce because it reduces the time needed to sell a vehicle. Furthermore, luxury dealerships benefit because the internet enables broadening their geographic customer base.

The buyers whom we interviewed stated that before the internet's implementation they were at the "mercy of dealers." Buyers were particularly aware of their unequal and weak position *vis-à-vis* dealers which made them feel "helpless." The buyers therefore perceived the improved bargaining position *vis-à-vis* dealers as a key advantage of the internet purchase:

> I feel more comfortable buying a vehicle [using the internet]...You get access to all kinds of information that ordinarily you would not. [The internet] puts you on a level playing field... (Jonathan).

[An internet buyer] who really does the homework evens the playing field and puts him/her in a more powerful position than before the internet existed (Steven).

Because of the internet I felt that I had gathered so much more information and was in such a better position to bargain than I would have had I not used the internet (Barry).

The internet helps buyers realize their goal by acting strategically: they use information collected from various web sites (e.g. Edmonds, Kelly Blue Book, dealers' and manufacturers' web sites) to influence vehicle dealers to sell a car at a lower price. For example, by using Kelly Blue Book and other web sites one of our interviewees acquired information about invoice prices, suggested manufacturers' retail prices, holdbacks, vehicle ratings, actual purchase prices, etc. He then emailed selected dealers, requesting them to bid the car with the characteristics he wanted:

I went out and bid the car [via email] . . . [in a day] I had three bids in my hand . . . all were below invoice price . . . I went back to the dealer that had exactly the car I wanted and asked [via email] whether they'd match the lowest bid and they said yes (Barry).

Barry made dealers compete and lowered the car price, thus achieving his objective. While dealers had to lower the car's price to stay competitive, they also competed on other features (e.g., delivery date, purchasing conditions, after sale services, etc).

Our findings suggest that information and services provided by e-commerce create an impetus toward vehicle trading as a form of strategic action. By enhancing the buyer's bargaining position e-commerce has led to more symmetrical power relations between buyers and dealers. According to both the buyers and the dealers whom we interviewed the internet has resulted in power redistribution away from the dealer and toward the customer. As a result prices came down[11], trading conditions became more equitable (i.e. fewer chances for manipulation and deception[12]) and buyers' experiences with the purchasing process became much more satisfying.

E-commerce and communicative action
While it is still unclear to what extent the internet might benefit dealers (Grover and Ramanlal, 1999), our empirical evidence shows that dealers are struggling to compete in the new trading environment. The vehicle dealers trade association (NADA, 2000) warns that the internet has significantly changed "competition on reach." While location convenience still matters, reaching buyers via the internet, availability of rich information and user-friendly e-commerce services are disrupting business boundaries and affecting dealers' competitiveness. NADA advises dealers to embrace e-commerce as a new means for reaching, attracting, interacting with, and maintaining customers. In fact several dealers explored new business models by emphasizing new and better services on their internet sites and also by changing their attitudes toward and establishing better relationships with buyers. Such behavior, while economically sound in the expanded and more competitive marketplace, cannot be fully explained by strategic action. Hence we need to focus on communicative action to examine whether and to what extend it can help understanding dealer behavior.

An important theme across the interviews was building personal relationships between buyers and salespeople. The manager of the Best Imports dealership (which in 2002 sold about 30 percent of its vehicles online) believes that what matters is "buyers' experience" which improved significantly when the dealership managed to develop relationships with customers:

You've got to explain the relationship and what you are going to do for them after the sale. It is more than just buying the car. There are a lot more things that go into it. Because if we just sold you a car – that takes about 15 minutes to do. It is the relationship for the next 4-5 years is what we think we do a better job of than just selling a car. I'm here about 80 hours a week. We sell about 80 cars a month – 100 cars on a good month – and 90 percent of my time is not negotiating deals. It is taking care of customers and other issues that are not related just to the sale.

This manager emphasizes that he perceives relationship building not as a pretense to impress, influence, and consequently retain the customer, but as a value added activity that makes for a better dealership, thus creating competitive advantage. This dealership changed attitudes towards its customers by putting a much higher emphasis on building long-term relationships than was customary before the internet's arrival.

For a manager at the Luxury Plaza dealer a key question is: "What do I have to do to have you as a customer?" Therefore he wants to know more about a customer and his/her needs and desires. Based on his experience he believes that getting to know a customer and developing a relationship is mutually desirable:

I am trying to build a relationship and make an appointment … and reach a level of comfort … and what happens is when you get more information you build a relationship … Most of the people I find want more of a relationship and when they get closer to buying they will call you or you will call them and you will have a really good conversation. You are going to get to know each other and feel more comfortable with each other.

This manager believes that relationship building is especially important in the case of internet customers:

I find internet customers especially more concerned about relationship and ease of transaction … [They] want to be respected and to know that they can get what they want or something reasonably close that they are happy with. And then fourth or fifth down the line a fair price.

This manager also mentioned the importance of e-mail and phone communication to maintain particularly enjoyable long-term relationships with customers. Good relationships, he stated, enable smooth sales transactions. From this dealer's perspective building long-term relationships with the customer achieves better mutual understanding and creates a sense of commitment and trust which – as other dealers also believe – leads to customer satisfaction and loyalty.

On the other hand buyers do understand that a long-term relationship with the customer is in the dealer's interest because of the expectation that the customer will return periodically to have his/her car serviced. One customer explains:

If you have a good experience in buying a car from [a dealer] they know you are going to come back to them for service all year long. And we have been doing that. We have been going back to them for service. … They do a good job following up on the service … They remind you. They send you emails telling you that an oil change is due on the car … So that is like good money for them for the next couple of years (Shidu).

Buyers have an interest in building a good and lasting relationship with a dealer, as well. From the buyers' perspective such a relationship decreases the perceived risks

and the complexity of decision making, even if at a distance, as was the case with several out of state car buyers from the Luxury Plaza dealer.

Furthermore, Shidu and other internet buyers whom we interviewed emphasized the difference in their salesperson's attitude during the car buying process. Their satisfaction with e-commerce purchases was evident: they felt "comfortable," the process was "smooth" and "transparent," their interactions with the dealer were "hassle-free" with no "gamesmanship" going on (Table III). Buyers' satisfaction with e-commerce, it seems, does not only arise from being well informed and empowered but also from the dealer's more professional and friendly attitude.

When dealers demonstrate a friendly and understanding attitude and aim to build and nurture long-term relationships with customers, as described above, their actions cannot be fully explained by the strategic model of action. Namely, to achieve their goals and increase their profitability some dealers abandoned aggressive and hard-sell approaches (still prevailing in the industry) and adopted a more friendly, soft-sell approach. This approach led them to develop better understanding of customers' needs and based on that provided high quality service to take care of customers long-term. These dealers believe that in order to more effectively meet customer needs they need to establish social interaction and build relationships with customers, and thereby achieve mutual understanding via the internet and face-to-face contacts, when necessary. Such a change in attitude and orientation in achieving goals indicates that dealer behavior is not so much strategically rational as it is communicatively rational. They not only attempt to influence the customer, but more importantly endeavor to cooperate with their customers and provide better quality and value-adding services that will lead to both their goal's achievement and customers' satisfaction and loyalty.

Furthermore, such a long term relationship formed around the sale and servicing can lead to what Riihimaa (2004) calls "higher level" cooperation. In so doing dealers try to understand buyers' lifestyle, their personal situation, financial constraints, desires and feelings, and so on. In other words, such communication refers not only to the objective world of vehicle features and purchase conditions, but it also refers to the social world of values and norms and to the customer's inner subjective world of desires and feelings. Buyers on their part are very perceptive while judging the dealer's behavior and they undoubtedly recognize when they are treated fairly and with respect. Given the complexity of a vehicle purchase decision and risks involved, it is not surprising that buyers appreciate dealers' supportive attitude and reciprocate with trust and loyalty. These arguments lead us to suggest that such dealer and buyer behavior may be interpreted as a form of communicative action.

What is particularly interesting in this analysis is dealers' recognition that with e-commerce, which brings increasingly harsh competition and diminishing margins, they need a change in attitude and need to conduct their business in a manner that appears more like communicative action than strategic action. Buyers and some dealers appear to grasp that purchasing processes and related after-purchase services are more likely to be successful when they are conducted in a more cooperative way; that is to say, as a form of communicative action. Put differently, the more e-commerce purchasing involves social interaction via the internet and face-to-face communication that approximates the "ideal speech situation" (Habermas, 1984), the greater the likelihood of successful and satisfying transactions and customer loyalty. However, this is always a matter of degree. A dealer may be tempted to influence, even

manipulate, the buyer while appearing to act communicatively and thus slip into covert strategic action. The buyer may counteract by stopping the buying process or with his/her own covert strategic action.

The communicative form of action as a means to achieve goals seems to be perceived by buyers as desirable and by some dealers as necessary under the new e-commerce conditions. However, effective communicative action via the internet is limited by both technical and communicative competence of its actors. Buyers on their part need to have sufficient understanding of the internet and to be proficient in navigating and information gathering across several web sites. They also need to develop adequate communication and negotiation skills. Inadequate technical and communicative competence among buyers may explain in part why the percentage of internet buyers is not increasing much faster despite its evident benefits. Dealers need to change their attitude toward customers and envisage different ways of conducting the business in the new social conditions. This implies dealers' re-orientation to understanding and cooperation with customers and also increased communicative competence. As this is a radical change that runs contrary to the vehicle retailing industry's culture, it is not clear whether and how fast it will come about.

The findings from our empirical study of vehicle sales/purchase processes discussed in this section reveal emerging changes in the behavior of dealers and buyers as they come to terms with e-commerce. We first investigated these changes from the perspective of actors – by listening to the voices of buyers and sellers. Next, we involved ourselves with the experiences of buyers and sellers and developed a theoretical understanding through a dialogue between their interpretation of these experiences and our theoretical re-interpretation using the language and the theoretical framework of Habermas's TCA (1984, 1987). The characteristic models of social action – identified through such a hermeneutic process – help us view dealers' and buyers' experiences through a lens that amplifies social conditions of vehicle purchasing processes. This in turn allows us to examine power relations among the actors and fairness of trade. Our theoretical reinterpretation of dealer and buyer behavior can be summarized as follows:

- Purchasing vehicles using instrumental action has become feasible – some buyers adopted instrumental action because of its perceived efficiency, convenience, and fairness.

- Purchasing vehicles using strategic action as seen under traditional commerce conditions has been strengthened further under e-commerce conditions. However, this fact is accompanied by a significant shift in seller–buyer power relations: access to online information led to a "level playing field" and empowered buyers to effectively counteract the strategic actions of dealers. Thus both dealers and buyers attained more equitable bargaining positions, leading to increased levels of competition among dealers and decreasing prices.

- While trying to survive and achieve competitive advantage in an increasingly competitive market, some dealers are exploring new strategies to attract and retain customers – dealers aim to achieve their goals by establishing better understanding with customers and by developing long term and a more cooperative customer relationship. Such behavior, which can be characterized as a form of communicative action, is perceived by these dealers and by NADA's

position paper (2000) as the only economically viable strategy under the new market conditions brought about by e-commerce.

These findings and interpretations draw our attention further to the dynamics of change in vehicle trade practices as more trading takes place through the internet, which we discuss in section 4.

4. Discussion and interpretation of changing practices in vehicle sales

We will use the semiotic square (Nöth, 1990) to explore the changes in vehicle sales practices as more vehicle buyers search for information on the internet to complete the purchasing process (Figure 3)[13]. The horizontal axis signifies salesperson's attitudes, which range from "aggressive" and "hard sell" to "supportive" and "soft sell." The vertical axis signifies the customer's perception concerning the buying process's fairness, ranging from "unfair" to "fair" (NADA, 2000; Phillips, 2001). The semiotic square describes the sale process's "field of action." The quadrants of Figure 3 signify different sales practices and social behaviors. By interpreting our empirical findings using the semiotic square we seek to explain the dynamics of change and trends in vehicle trade practices.

Traditional vehicle sales practices are located in the lower right hand quadrant of Figure 3 ("aggressive-hard sell/unfair"). Sales people used hard sell and aggressive techniques that caused buyers to dislike purchasing a vehicle, to be intimidated by the process, and to experience the entire buying process as extremely unfair. Traditional
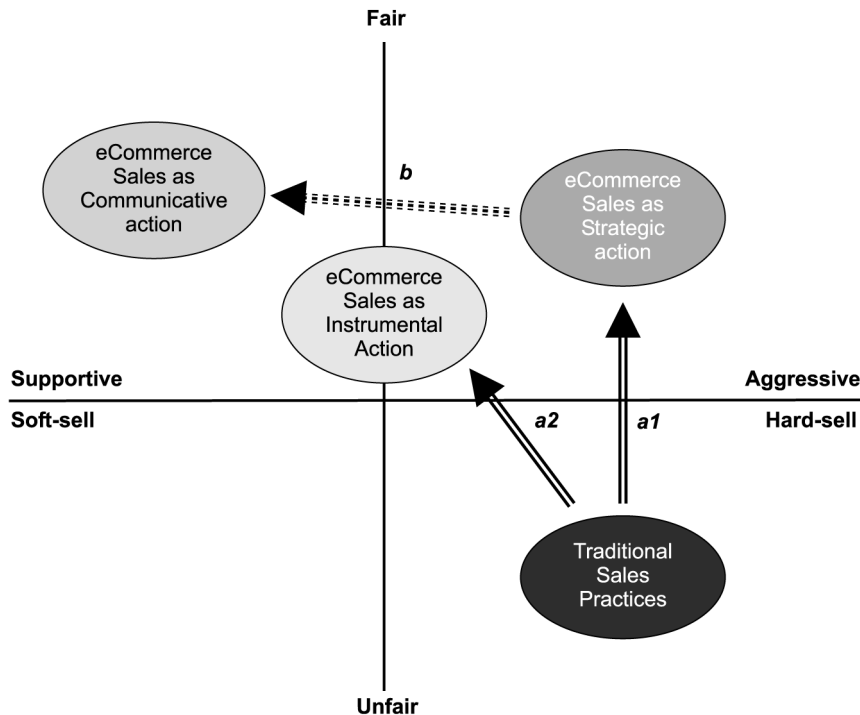

Figure 3.
The changing practices of vehicle sales: from the traditional to e-commerce trade

sales conditions were characterized by the dealer's strategic advantage arising from its privileged access to information and the use of unfair techniques of persuasion. A former salesperson explained:

> The system [i.e. traditional sales system] was not set up for educated people who thought for themselves, it was not to help customers make informed decisions. The system was designed to catch people off guard, to score a quick sale, to exploit people who were weak and uninformed (Phillips, 2001).

Salespersons subjected buyers to psychological pressures, passing customers from one salesperson to the next, and using the office phone to contact a fictitious sales manager to obtain low-ball estimates on a trade-in vehicle (Phillips, 2001). Such elaborate "gamesmanship" was experienced by buyers as frustrating and intimidating. Whereas the behavior of both sellers and buyers can be described as strategic action, inequitable access to information and a power imbalance ensured the success of strategic action by the seller at the expense of the buyer. The strategic disadvantage under the traditional trade practices motivated buyers to explore purchasing a vehicle using the internet.

Buyers who use the internet to purchase a vehicle at the lowest price engage in either strategic or instrumental action (sections 3.3 and 3.4). Since buyers are better informed and have richer information in hand, they become better at predicting and counteracting the salesperson's actions and, hence, become more efficient at strategic action. Due to equal access to information and increasing use of information sources on the internet, buyers are changing their strategic position and are gaining bargaining power *vis-à-vis* sellers. The model of strategic action explains how the internet "shifts bargaining power to consumers" (Porter, 2001, p. 67). Moreover, such behavior leads to intensified rivalry among the dealers and shifts competition more toward price[14].

This trend is also identified by market research and discussed as a major transformation of vehicle sales practices in NADA's industry documents. Using TCA language this means the transformation from traditional strategic action with sellers' enjoying privileged information access to e-commerce assisted strategic action, with sellers and buyers sharing more equal bargaining positions. The nature of this transformation is represented in the semiotic square (Figure 3) by the arrow "a1". In other words, sales practices characterized by strategic action are gradually transformed from "unfair" to "fair" while remaining "aggressive-hard sell."

Furthermore, buyers who use the internet to investigate prices, vehicle availability, and purchasing and financing conditions, and to work the best deal by completing the whole process via the internet, in effect perform instrumental action (section 3.3). Buyers in this way minimize social interaction with salespeople, avoid their "gamesmanship" and thereby disable their strategic action. This change in sales practices is signified by arrow "a2" of Figure 3, indicating the transformation from the traditional unfair to fair sales practices that are neutral along the "aggressive-hard sell" and "supportive-soft sell" axis.

The increased buyer opportunities to perform successful instrumental and strategic action change the playing field and gradually transform sales practices from "unfair" to "fair" (arrows "a1" and "a2"). These arrows indicate emerging changes in vehicle trade practices and should not be understood as a simple switch from one quadrant to another. Grounded in our analysis of empirical data (buyers' and dealers' interviews and on-site observations) and supported by industry wide documents and analysis (NADA, 2000) we argue that transformations "a1" and "a2" of vehicle trade practices

reflect the major changes in the social behavior of actors arising from new e-commerce conditions. These transformations in turn lead to a widening geographic market, increasing competition and lowering prices.

These changes, we must note, are not necessarily linear and progressive in nature. To improve their strategic position and be more strategically rational (achieving their goals by influencing buyers), dealers use the internet and collect information about their customers, potential buyers and their competitors. Moreover, dealers also design better web sites by establishing links with third party web sites, thus providing better customer support. Because these attempts heighten competition, they may be seen as yet another and more sophisticated form of aggressive and hard sell practices aimed at confusing and deceiving customers. However, such attempts are typically not long lived because the internet buyers are not only becoming better informed but are also better versed in finding and judging information sources. By "comparing information from different sources," as explained by one buyer whom we interviewed, buyers easily discover such strategies and just avoid such dealers' web sites.

It is important to point out that many dealers realize the broader implications of e-commerce for the industry: the more buyers and dealers adopt e-commerce the more evident its negative effects for the dealers – increasing competition and decreasing prices as predicted by Porter (2001). This realization made some dealers question their aggressive and hard sell tactics (strategic action) which was endemic under traditional vehicle sales conditions. Aggressive and hard sell tactics, dealers admit, is increasingly becoming less effective under e-commerce conditions. The same view is expressed by NADA's (2000) position paper in which the dealer association advises dealers that the internet has changed vehicle retailing and warns that the "hard sell" strategy will be unsuccessful in the e-commerce environment. Instead, the position paper proposes that sales people abandon aggressive sales strategy and adopt a customer-friendly role of "facilitator":

> Today's "vehicle salesman" is a professional sales consultant who often is working both on- and off-line. Using more than sales skills, this person offers customers a low-pressure, fair price, self-service experience, and is more of a "facilitator" in the selling transaction than a hard "closer." Conventional hard-close techniques are fast being eliminated from the sales consultant's job description (NADA, 2000).

As we stated earlier, some dealers do realize the need to abandon a "hard sell" approach and to develop a cooperative and long term relationship with buyers. Furthermore, buyers who used the internet emphasized their satisfaction with changing sales practices and dealers' more supportive and accommodating attitude (see section 3.4 and Table III). These signs of changing sales practices are interpreted as indicative of a transition towards communicative action. While the transition towards communicative action is more a desirable trend (described by NADA as the only economically viable behavior by dealers, as discussed in section 3.5) than a widely accepted change, it is nevertheless important to understand the overall picture of the dynamic changes and trends in the vehicle trade industry. This trend is therefore presented in the semiotic square as the tentative transition "b" from the quadrant "aggressive-hard sell/fair" to the quadrant "supportive-soft sell/fair" (Figure 3).

Transition "b" represents attempts by some dealers to be more supportive and cooperative in their interaction with customers (both via the internet and face-to-face) and to develop mutually satisfying relationships as a basis for successful business

transactions and achievement of goals. It also represents the essence of NADA's advice for vehicle dealers to adopt a customer-friendly and supportive role and in fact transform trade practices in accordance with what we identified as a model of communicative action. Such a change in attitude and sales practices, according to NADA's paper, will help dealers to differentiate themselves and compete based on service quality and buying experience, with potentially significant implications for their profitability and long term survival. Furthermore, transition "b" signals the change in buyers' behavior in response to emerging changes in dealers' behavior. However, a lack of communicative competence on the part of salespersons and buyers and the particular culture of the vehicle distribution industry are barriers to transition "b". Even when actors attempt to transact business in the form of communicative action their attempts are not necessarily genuine or successful[15].

5. Conclusion

In this paper we adopted Habermas's *Theory of Communicative Action* (1984, 1987, 2001) to examine and interpret multiple case studies of vehicle buyers and sellers with the aim to understand how social conditions arising from B2C e-commerce affect their social behavior and trade practices. The use of Habermas's TCA framework enables a particular social-theoretic approach to studying e-commerce, according to which commercial transactions are seen as social interaction and sellers' and buyers' behavior is interpreted as *social action*. The framework draws attention to new social conditions emerging from e-commerce and enables gaining insights into the ways these affect sellers' and buyers' power relations, their actions (commercial transactions) and the nature of trade practices. The TCA framework and the findings presented in the paper have implications for understanding B2C e-commerce and its effects on buyers' bargaining position, company competitiveness and profitability, and more broadly on the vehicle retailing industry's structure.

First, understanding of B2C e-commerce is expanded by revealing and examining its social dimension. The view of B2C e-commerce as social interaction among trading partners – sellers and buyers who aim to achieve their typically opposite goals – enabled identification and exploration of the prevailing models of social behavior in commercial transactions.

Second, the findings from our case studies drawn for the vehicle retail industry suggest that e-commerce motivates and assists actors in transacting their business in the form of instrumental, strategic or communicative action, albeit each for different reasons and in a different way. For instance, some buyers choose to purchase their vehicles almost entirely via the internet as a form of instrumental action because of its perceived efficiency, convenience (avoids face-to-face contact with dealers) and fairness. This model of social behavior in business transactions is new and is becoming increasingly more feasible with technological advancements in e-commerce. On the other hand, purchasing vehicles as a form of strategic action, which was the dominant model in traditional commerce, has been further strengthened and at the same time has been changed by e-commerce. Buyers in particular attain a more equitable bargaining position *vis-à-vis* dealers due to new social conditions brought about by B2C e-commerce – public availability of and equality of access to information, and provision of rich information and new services by third parties such as Edmondson and Kelly Blue Book. Such a shift in bargaining power to the buyer within the strategic

model of actions means that buyers are empowered to effectively counteract the strategic actions of dealers and become themselves more successful in acting strategically and achieving their goals. As a consequence the shift in seller–buyer power relations "levels the playing field" and transforms trade practices toward more transparent, equitable and fairer trade practices.

Third, NADA's (2000) analysis of new market conditions created by e-commerce and its impact on the vehicle retail industry corroborate our empirical findings. NADA's analysis also confirms the general impacts of e-commerce on industry structure identified by Porter (2001): increasing competition among the dealers, decreasing prices and migration of competition to price, decreasing profitability of the average dealer, and erosion of traditional sources of competitive advantage. The contribution of this paper is better understanding of sellers' and buyers' social behavior in the e-commerce environment that engenders these impacts. More precisely, the insights from our empirical study into the two models of social behavior of actors in business transactions (i.e. strategic and instrumental action) explain the underlying mechanisms by which e-commerce social conditions transform trade practices and impact industry structure.

In addition to the models that explain the observed trends in the industry, our findings reveal cases of social behavior that do not fit the trends and indicate the emergence of a different model. Namely, to counteract the trends and find new ways to become competitive, some dealers adopt new strategies to achieve their goals. They establish better understanding with customers and develop long term and more cooperative relationships through both the internet and face-to-face social interaction. Such social behavior of dealers, characterized by the communicative model of action within the TCA framework, is perceived by these dealers, as well as by NADA's (2000) position paper, as the only economically viable strategy given the new e-commerce conditions. Some buyers on their part recognize and appreciate this change in dealer orientation and adopt the communicative model for their own reasons – to decrease risks and complexity of purchasing decisions. While our findings suggest that the adoption of the communicative model may be an emerging trend beyond the strategic model dominant in the vehicle retail industry (see Figure 3), more empirical work is required to claim that it really is the case.

Nevertheless, our cases of the adoption of the communicative action (?) model of business transactions demonstrate that both dealers and buyers have clear economic motivation. Analysis of these cases explains how the communicative model leads to fairer and more supportive, soft-sell trade practices. It also suggests that through the communicative model dealers aim to differentiate themselves and compete based on quality and uniqueness of services, trustfulness and relationships with customers, thereby achieving competitive advantage and profitability. While these sources of competitive advantage and profitability are not new, they obtain new meaning and become stronger in e-commerce social conditions. Porter (2001) echoes this conclusion when he states that robust competitive advantage will arise from traditional strengths and that:

> Internet technology may be able to fortify those advantages, by tying a company's activities together in a more distinctive system... Ultimately, strategies that integrate the internet and traditional competitive advantages and ways of competing should win in many industries (2001, p. 78).

In short, our findings help us understand the mechanisms by which the adoption of the communicative model by actors in e-commerce might impact the industry structure and reverse the current trends.

Finally, the study's findings are expected to have relevance for practitioners involved in the development and deployment of e-commerce technologies. By describing how new social conditions arising from e-commerce impact actors' behavior, trade practices and industry structure, the paper draws attention to the social dimension of technological change, with relevance to both existing and new e-commerce technologies. More empirical research is needed to examine the requirements for improving the design of e-commerce support for the instrumental, strategic or communicative model of business transactions.

Our empirical study was restricted to e-commerce in the vehicle retail industry during a particular period of time (2001-2004) with dealers and buyers located in the USA. While some findings reported in this paper may be relevant for the broader retailing industry and B2C e-commerce generally, similar studies focusing on other types of products/services and also located in other parts of the world are called for to enable cross-product and cross-cultural comparisons. Finally, because e-commerce trading conditions are constantly changing, the application of the Habermasian social theoretic framework to longitudinal case studies will be particularly valuable in tracing and explaining the dynamics of long term changes in the social dimension of e-commerce.

Notes

1. Some authors proposed to add the concept of discursive action (Lyytinen, 1986; Lyytinen and Klein, 1985; Ngwenyama and Lee, 1997) to Habermas's classification of action types. If the discursive activity were considered an action type as such and not an integral component of communicative action, the concept of communicative action would lose its major feature. As Ludwig (1996, p. 117) points out, discourse with respect to validity claims is not a separate action type but constitutes an integral part of communicative action.

2. Habermas's concept of an ideal speech situation has been misinterpreted and assailed as being unrealistic or even utopian (Cooke, 1998; Wilson, 1997). However, as Reese-Schäfer (2001) explains, an ideal speech situation never exists under practical circumstances. Rather, the ideal speech situation must be understood as a desirable goal that one tries earnestly to achieve but that nevertheless will always stay out of reach.

3. We obtained confirmation from several vehicle dealers, Edmunds Incorporated, and one vehicle manufacturer that intermediaries such as Edmunds and Kelley Blue Book do indeed publish correct invoice prices, i.e. the prices that the manufacturer charges the dealer.

4. Greywitt, M., and Tews, J. (2004) reported that 64 percent of new car buyers use the internet, of internet users 59 percent find independent sites most useful, and 39 percent find manufacturer's web sites most useful.

5. Many interpretivist researchers warned against imposing a theory on data. Although theory as a guide to design and data collection or as part of an iterative process of data collection and analysis and as a final product, is valuable and important. Walsham (1995) points to the danger of the researcher only seeing what the theory suggests (p. 76). An essential aspect of hermeneutic analysis is to remain open to the meaning of the other person or text (Gadamer, 1975, p. 269). To be open to other persons means to broaden the horizon of possible understanding, to listen to and hear the other, to have a capability to move between one's own perspective and the perspective of the other (Ezzy, 2002). Hermeneutic understanding

involves a dialogue with the phenomenon studied, asking what it means to those who create it, and attempt to integrate that with its meaning to us (Bentz and Shapiro, 1998, p. 111).

6. Among a number of principles that underpin the hermeneutic approach is a hermeneutic rule that we must understand the whole in terms of the detail and the detail in terms of the whole, "... The harmony of all the details with the whole is the criterion of correct understanding (Gadamer, 1985, p. 291). The hermeneutic circle is also defined by Klein and Myers (1999) as the first among seven principles of interpretive hermeneutic field research.

7. Franchise laws made it illegal for manufacturers to sell directly to the public (Cooper, 2001). This protected dealers from disintermediation. Moreover, manufacturers' policies guaranteed dealers exclusive rights in the geographic area where they were located. In effect, the vehicle distribution industry was characterized by a policy of limited entry.

8. The dealers' and interviewees' names are pseudonyms.

9. A car's sticker price represents the maximum possible price customers may be asked to pay. Savvy customers negotiated a vehicle sales price that was below the listed sticker price. Because trucks lacked sticker prices, as is clear from the interviewee's quote, consumers lacked a starting point necessary for effective price negotiation.

10. This is confirmed by other sources. Siskos (October, 2002) for instance reports that online buyers save at least 2 percent of the purchase price they would otherwise pay (Kiplinger's Personal Finance, 2002, p. 34).

11. Morton, F. S., and Zellelmeyer, F. (2003) reported that internet car buyers paid on average 0.9 percent or approximately $300 less per car purchase than did buyers who did not use the internet. Morton *et al.* (2001), however, reported a price decrease of $450. For a detailed discussion on the impact of e-commerce on price the reader is advised to consult Koch and Cebular (2002).

12. The internet is an amazing tool for car shopping. It levels the playing field by giving accurate information to the customer. It forces dealers to slice profit because they must beg for your business. It allows customers to comparison shop loans and leases, as well as extended warranties and insurance. It gives the consumer power (Phillips, 2001).

13. Greenspan report showing that 63 percent of online Canadians have used the internet to search online for vehicle prices, features or other information (www.clickz.com/stats/big_picture/traffic_patterns/article.php/3065321) (August 19, 2003).

14. From this point of view Porter (2001) perceives the internet effects on the industry structure as negative. NADA (2000) reported that the percentage of dealers providing customers online price quotes, used car locator, credit application, scheduled service/maintenance, scheduled test drive, build-a-car, home delivery is 70 percent, 65 percent, 60 percent, 55 percent, 30 percent, 20 percent, and 10 percent, respectively.

15. We further recognize the potential for covert strategic action (Habermas, 1984), which is strategic action disguised as communicative action. Buyers and sellers may pretend to act communicatively while, in fact, they act strategically. Especially traditional salespersons with finely honed negotiation skills and long experience in the car retailing industry can be expected to attempt covert strategic action. On the other hand, the changing trade conditions arising from e-commerce are gradually making such attitudes and social behavior less effective and less socially acceptable.

References

Alvesson, M. and Deetz, S. (2000), *Doing Critical Management Research*, Sage Publications, London.

Axelsson, K., Melin, U. and Goldkuhl, G. (2002), "Understanding B2B interaction: a model to accentuate inter-organizational systems design issues", in Wrycza, S. (Ed.), *Proceedings of the 10th European Conference on Information Systems, Gdansk, Poland, July*, pp. 541-50.

Bentz, V. and Shapiro, J. (1998), *Mindful Inquiry in Social Research*, Sage Publications, London.

Brynjolfsson, E. and Smith, M.D. (2000), "Frictionless commerce? A comparison of internet and conventional retailers", *Management Science*, Vol. 46 No. 4, pp. 563-85.

Cecez-Kecmanovic, D. (2001), "Doing critical IS research: the question of methodology", in Trauth, E. (Ed.), *Qualitative Research in Information Systems: Issues and Trends*, Idea Group Publishing, Hershey, PA, pp. 142-63.

Cecez-Kecmanovic, D. and Janson, M. (2000), "Communicative action theory: an approach to understanding the application of information systems", *Proceedings of the 10th Australasian Conference on Information Systems, Wellington*, pp. 183-95.

Checkland, P.B. (1981), *Systems Thinking, Systems Practice*, Wiley, New York, NY.

Cooke, M. (1998), *On the Pragmatics of Communication*, The MIT Press, Cambridge, MA.

Cooper, M. (2001), "A roadblock on the information superhighway: anticompetitive restrictions on automotive markets", Consumer Federation of America, Washington, DC, pp. 1-39.

Edmunds Publications (2004), *Edmunds New Cars and Trucks: Prices and Reviews*, Edmunds Publications, Santa Monica, CA, available at: www.edmunds.com

Ezzy, D. (2002), *Qualitative Analysis: Practice and Innovation*, Allen & Unwin, Sydney.

Gadamer, H. (1975), *Truth and Method*, Sheed & Ward, London (trans. by J. Weinsheimer and D. Marshall).

Geuss, R. (1981), *The Idea of a Critical Theory: Habermas and the Frankfurt School*, Cambridge University Press, New York, NY.

Greenspan, R. (2003), "Auto sales drive consumers to the web", available at: www.clikz.com/stats/big_picture/traffic_patterns/article.php/306532/(accessed August 19, 2003).

Greywitt, M. and Tews, J. (2004), "Automotive internet users increasingly visit manufacturer websites first during the shopping process", available at: www.jdpa.com/pdf/2004101.pdf

Grover, V. and Ramanlal, P. (1999), "Six myths of information and markets: information technology networks, electronic commerce, and the battle for consumer surplus", *MIS Quarterly*, Vol. 23 No. 4, pp. 465-95.

Habermas, J. (1984), *The Theory of Communicative Action, Vol. I, Reason and the Rationalization of Society*, Beacon Press, Boston, MA (trans. by T. McCarthy).

Habermas, J. (1987), *The Theory of Communicative Action, Vol. II, Lifeworld and Systems: A Critique of Functionalist Reason*, Beacon Press, Boston, MA (trans. by T. McCarthy).

Habermas, J. (2001), *On the Pragmatics of Social Interaction: Preliminary Studies in the Theory of Communicative Action*, The MIT Press, Cambridge, MA (trans. by B. Fultner).

Hirschheim, R. and Klein, H.K. (1989), "Four paradigms of information systems development", *Communications of the ACM*, Vol. 32 No. 10, pp. 1199-216.

Hirschheim, R. and Klein, H.K. (1994), "Realizing emancipatory principles in information systems research: the case for ETHICS", *MIS Quarterly*, Vol. 18 No. 1, pp. 83-109.

Johnson, E.J., Moe, W.W., Fader, P.S., Bellman, S. and Lohse, G. (2004), "On the depth and dynamics of online behavior", *Management Science*, Vol. 50 No. 3, pp. 299-309.

Kalakota, R. and Whinston, A. (1996), *Frontiers of Electronic Commerce*, Addison-Wesley, Reading, MA.

Kelley Blue Book (2004), Kelley Blue Book Company, Irvine, CA, available at: www.kbb.com

Klein, H. and Myers, M. (1999), "A set of principles for conducting and evaluating interpretive field studies in information systems", *MIS Quarterly*, Vol. 23 No. 1, pp. 67-88.

Koch, J.V. and Cebula, R.J. (2002), "Price, quality, and service on the internet: sense and nonsense", *Contemporary Economic Policy*, Vol. 20 No. 1, pp. 25-37.

Koningsveld, H. and Mertens, J. (1992), *Communicative and Strategic Action* Coutinho, Muiderberg (in Dutch).

Ludwig, B. (1996), *Computer Support for Group Argumentation*, Der Deutsche Universitäts-Verlag, Wiesbaden (in German).

Lyytinen, K. (1986), "Information systems development as social action: framework and critical implications", Jyväskylän Yliopisto, Jyväskylä, unpublished doctoral dissertation.

Lyytinen, K. (1992), "Information systems and critical theory", in Alvesson, M. and Wilmott, H. (Eds) *Critical Management Studies*, Sage Publications, London, pp. 159-80.

Lyytinen, K. and Hirschheim, R. (1988), "Information systems and rational discourse: an application of Habermas's *Theory of Communicative Action*", *Scandinavian Journal of Management*, Vol. 4, pp. 19-30.

Lyytinen, K. and Klein, H.K. (1985), "The critical theory of Jürgen Habermas as a basis for a theory of information systems", in Mumford, E., Hirschheim, R., Fitzgerald, G. and Wood-Harper, A.T. (Eds), *Research Methods in Information Systems*, Elsevier Publishing, New York, NY, pp. 219-36.

Morton, F.S., Zettelmeyer, F. and Risso, J.S. (2001), "Internet car retailing", *Journal of Industrial Economics*, Vol. 49 No. 4, pp. 501-19.

Mumford, E. (1981), "Participative system design: structure and method", *Systems, Objectives, Solutions*, Vol. 1 No. 1, pp. 5-19.

Mumford, E. (1983), *Designing Human Systems – the ETHICS Method*, Manchester Business School Press, Manchester.

Napier, H.A., Judd, P.J., Rivers, O.N. and Wagner, S.W. (2003), *Creating a Winning E-Business*, Thomson Learning, Boston, MA.

National Vehicle Dealers Association (2000), *A Dealer Guide to the Internet, eCommerce, and Web-Enabled Business*, available at: www.nada.org

Ngwenyama, O. and Lee, A. (1997), "Communication richness in electronic mail: critical social theory and the contextuality of meaning", *Management Information Systems Quarterly*, Vol. 21 No. 2, pp. 145-67.

Nöth, W. (1990), *Handbook of Semiotics*, Indiana University, Bloomington, IN.

Outhwaite, W. (1996), *The Habermas Reader*, Polity Press, Cambridge.

Patton, M.Q. (1990), *Qualitative Evaluation and Research Methods*, 2nd ed., Sage, Newbury Park, CA.

Phillips, C. (2001), *Confessions of a Car Salesman*, available at: www.edmunds.com/advice/articles/42962.html

Porter, M. (2001), "Strategy and the internet", *Harvard Business Review*, Vol. 79 No. 3, pp. 63-78.

Rasmussen, D.M. (1990), *Reading Habermas*, Basil Blackwell, Cambridge, MA.

Reese-Schäfer, W. (2001), *Jürgen Habermas* (in German), Campus Verlag, Frankfurt am Main.

Riihimaa, J. (2004), *Taxonomy of Information and Communication Technology System Innovations Adopted by Small and Medium Sized Enterprises*, University of Tampere, Tampere.

Roderick, R. (1986), *Habermas and the Foundations of Critical Theory*, St Martins Press, New York, NY.

Roszak, T. (1997), *The Cult of Information*, University of California Press, Berkeley, CA.

Siskos, C. (2002), "Direct route to a fairer price", *Kipplinger's Personal Finance*, Vol. 56 No. 10, p. 34.

Turban, E., Lee, J., King, D. and Chung, M. (2000), *Electronic Commerce: A Managerial Perspective*, Prentice-Hall International, Upper Saddle River, NJ.

Varey, R.J., Wood-Harper, T. and Wood, B. (2002), "A theoretical review of management and information systems: using a critical communications theory", *Journal of Information Technology*, Vol. 17, pp. 229-39.

Verboven, F. (1999), "Product line rivalry and market segmentation", *Journal of Industrial Economics*, Vol. 47 No. 4, pp. 399-427.

Walsham, G. (1995), "The emergence of interpretivism in IS research", *Information Systems Research*, Vol. 6 No. 4, pp. 376-94.

Waring, T. (1999), "The challenge of emancipation in information systems implementation: a case study in an NHS Trust hospital", paper presented at Critical Management Studies Conference, Manchester.

Weber, M. (1964), *The Theory of Social and Economic Organization*, The Free Press, New York, NY.

Weber, M. (1978), in Roth, G. and Wittich, C. (Eds), *Economy and Society, Vol. I and Vol. II*, University of California Press, Berkeley, CA.

Weill, P. and Broadbent, M. (1998), *Leveraging the New Infrastructure*, Harvard Business School Press, Boston, MA.

Weill, P. and Vitale, M. (2001), *Place to Space*, Harvard Business School Press, Boston, MA.

Wellmer, A. (1985), "Reason, utopia, and the dialectic of enlightenment", in Bernstein, J.R. (Ed.), *Habermas and Modernity*, The MIT Press, Cambridge, MA, pp. 35-66.

White, S.K. (1988), *The Recent Work of Jürgen Habermas*, Cambridge University Press, New York, NY.

White, S.K. (1995), *The Cambridge Companion to Habermas*, Cambridge Press, New York, NY.

Wilson, F.A. (1997), "The truth is out there: the search for emancipatory principles in information systems design", *Information Technology & People*, Vol. 10 No. 3, pp. 187-204.

Further reading

J.D. Power & Associates (2003), "American car buyers research online", available at: www.nua.ie/surveys/index.cgi?f = VS&art_id = 905358450&rel = true (accessed October 14, 2003).

Morton, F.S. and Zettelmeyer, F. (2003), "Consumer information and discrimination: does the internet affect the pricing of new cars to women and minorities?", *Quantitative Marketing and Economics*, Vol. 1, pp. 65-92.