The Changing Landscape of Auto Distribution

Dorian Selz

Institute for Information Management, University of St.Gallen, Switzerland Email: Dorian.Selz@iwi.unisg.ch

Abstract

The emerging electronic marketspace will change the structure of value chains and will - in particular - increase the presence of intermediaries so called cybermediaries. The paper examines the roles and functions of these new players and their impact on established distribution and sales channels in the case of the automotive industry. Two different automotive cybermediaries categories are identified: automotive service brokers and automotive information brokers. Their initial success indicates that they might become serious competitors to the auto manufacturer's exclusive distribution systems. Our analysis focuses on the impact of the Web in an industry which is characterized by physical products and infrastructures. Based on this analysis and reconstruction of current trends in the auto industry, we will discuss strategic options for auto manufacturers using a blend of market brand strength mixed with the concept of an online community.

1. Introduction

The accelerating development of technology is placing increasing strains on traditionally structured organizations. Vertically integrated industrial giants and their similarly structured distribution channels are experiencing great difficulty in operating, competing and surviving. One of the reasons is the increasing popularity of the Internet that promises a dynamic development of electronic retailing. The Internet has the potential to evolve into an interconnected marketspace [[21]], facilitating the exchange of a wide variety of products and services. The interdependence between an innovative and constantly changing medium, new offerings by online vendors and adapting customer behavior will yield a radical restructuring of retailing and its underlying infrastructures of production, distribution, logistics and services. Stefan Klein

Institute for Information Systems, University of Muenster, Germany Email: Stefan.Klein@wi.uni-muenster.de

In this paper we focus specifically on two issues: Firstly, why are new electronic intermediaries emerging and how will they affect the established automotive distribution channel? In particular, what is the impact of digitally based services in an industry which is centered around physical products that require a physical traffic and service infrastructure. Secondly, given the success of independent dealers and cybermediaries, what are the options for auto manufacturers to fight back and to retain or regain their position. We conclude that the current automotive distribution channels will come under increasing strain by emerging electronic intermediaries and that they will have to offer a new value proposition and additional benefits to their current and newly gained customers.

The emergence of an integrated global economic structure will play havoc with conventional national markets. Instead of national markets feeding into international markets, the global market will influence national structures. This will cause considerable disruption, e.g. in traditional distribution chains. Existing value chains will become less static and value networks will take their place. Such networks will be dynamic, having many complex features, such as cross or floating links, reflecting the evolving market structure. Hence, to be successful in the next century, companies will have to drastically alter their structure and mode of operation.

The study is based on interviews with executives of Mercedes-Benz, an in-depth case study and extended monitoring of web based activities.

2. The background: Emerging electronic intermediaries

One of the major impacts of IT on the governance structure of business transactions is the brokerage effect [[17]]: IT reduces the cost for buyers to request quotes from several vendors and thus enables the bypassing of trade intermediaries. In times of intensified price competition, manufacturers or primary service providers get the opportunity to circumvent intermediaries and thus save some of the intermediaries' commissions and get direct access to the end customers [[3]].

However, numerous industry examples show that established intermediaries have been quite resilient: they have defended their position at least for the time being - as they could levthe erage current amount of business transactions against an uncertain amount of online transactions. Anecdotal evidence suggests that sales and distribution intermediaries have successfully protested or even threatened to penalize producers in order to force them to

Car Manufacturer Channel I Channel II Channel III Traditional Automotive Virtual Marketspace Independent Sales Organization Sales Organization Automotive Auto Superstores / Information Brokers (Web Distribution Networks Automotive National Service Sales Org Brokers (Web Exclusive New distribution I ocal outlets (Web Web Dealers Dealers Virtual Independent and traditional) Showroom Dealers strong control veak control by car manufacture by car manufacturer Direct link and Customer information/product flow Possible new alliances

Figure 1: Emerging distribution system in the auto industry

stop or severely restrict their direct sales activities.

Furthermore, not only are established intermediaries diversifying and building Web subsidiaries but new intermediaries, which are building their business purely in cyberspace and are thus called cybermediaries [[22]], are emerging and thriving in the market. Many of them are dwelling on shortcomings of online direct marketing, such as relatively high information cost for customers who are comparison shopping in decentralized electronic markets and a lack of transparency, which yield the uncertainty whether one has found the best offer available [[11]]. New players often show a better understanding of the characteristics of hypermedia computer-mediated environments and the entry barriers for electronic commerce are low. Global visibility allows even highly specialized businesses to generate sufficient revenues while established players face the challenge to prevent their past to become a burden which limits their flexibility, agility and understanding of the new medium.

3. Channel competition in the auto industry

With a turnover of well over \$1 trillion, and 10 million employees, the car industry is the world's largest manufacturing business. While many car makers are doing well at present, the outlook is rather grim. With increasingly saturated markets in the rich countries of Western Europe, Japan and North America, where the industry has until now earned most of its money, many are turning to the emerging markets of the developing world. But not only demand for cars in these new markets is growing, for a while the supply of new cars has been growing faster still, pushing down prices and profits. In 1996 the total output capacity was 68 million vehicles, but the combined output of all car firms was just 50 million – 73% of capacity [[10], [28]].

Adding to this discouraging outlook for car companies is the increasingly blurred picture of a product which used to have a strong brand identity. The cars of different manufactures look increasingly similar. Product differences are reduced to design aspects (often the car platform is the same for different models like Golf 4 and Audi A3), and thus require new branding concepts. At the same time, we move away from the simple durable good 'car' to a complex bundle, incorporating diverse services (e.g. finance; in Germany 70% of all cars are financed [[7]]). A variety of contractual arrangements such as pool leasing – a compact car for everyday and a station wagon for the holidays -, car sharing and rental cars are spreading. They underscore that mobility related needs can be fulfilled in many ways other than owning a car. The established automotive distribution channels are profoundly affected by the globally excessive capacity and resulting changes in the definition of the product. Even more so as agile newcomers use IT to repackage the product much leaner than the car companies themselves and their associated dealer networks.

Figure 1 shows a stylized description of the auto distribution channels:

- Channel I represents the manufacturers' exclusive sales organization, whereas
- Channel III refers to independent dealers. Recently the third channel has been substantially growing in the US. Auto superstores and networks of distributors have mushroomed [[13]].
- With the emergence of the Web a new channel has been established. Auto manufacturers are setting up virtual showrooms and exclusive dealers are using the Web to offer information and new services. Independent dealers use the Web aggressively to improve their market position and cybermediaries are reinventing auto promotion by providing abundance of information and access to the closest car dealer. And entirely new (Web-based) intermediaries have emerged: automotive information / service brokers. The black lines indicate the information flow. The dotted lines indicate some of the possible new alliances among the new virtual and physical independent dealers. Going from channel I where the car manufactures exert a strong influence to the right and channel III where the control of established car firms is limited.

3.1. The endangered position of exclusive dealers

From the perspective of exclusive dealers (channel 1), the competitive pressure is increasing despite their privileged (contractual) relationship with the auto manufacturers and their established role is threatened (cf. Figure 2):

- All major manufacturers plan to increase production capacity in the next years and expand their markets abroad [[9], [26]]. Consequently the competition between different brands is increasing.
- Lindquist [[8]] estimates that in car manufacturing the return-on-investments in real terms dropped sharply in the last years. Increasingly, the car manufacturers earn better profits from financing car sales or leases than from the sales of cars. Dense networks of exclusive dealerships and service stations - even though considered a strategic necessity because of positive network externalities for the customers - become hardly sustainable for the car companies.

- New entrants such as insurance companies, mailorder companies and car rental companies have begun to buy stakes of dealerships. They will reduce the car manufacturers control over dealerships.
- The suppliers, though contractually bound to their sales organization, are scrutinizing the opportunities of Web-enabled sales activities. The division of labor within the sales organization will be affected and more functions will be provided centrally.
- Large customers, namely car rental companies, are forging new alliances with independent dealers for used cars.
- Although auto manufacturers have long tried to protect their exclusive sales organization through contractual arrangements, pricing strategies and technical features which forced customers to have their cars serviced only by exclusive dealers, independent dealers are making inroads by offering new services and by providing more price transparency. Regulation in the EU is increasingly restricting the rights of car companies to enforce exclusive contracts.



Figure 2: Competitive forces in car distribution – cf. Porter [[20]]

• The role of independent dealers is leveraged by new cybermediaries, like Microsoft's Carpoint service, who are providing extensive information about the auto market such as technical features, quality assessments, prices and the closest dealer that offers the best price.

3.2. Why are the auto companies and their exclusive networks vulnerable?

Traditionally, auto manufacturers have tried to exert a close control over the sales and distribution channel in order to establish and develop relationships with their customers over time. The networks of dealers with various contractual relationships (from subsidiaries to independent multi-manufacturer dealers) are instrumental in this process and they usually cover a huge array of functions from sales of new and used cars, financing, repairs etc. (cf. Table 3). However, new types of dealership have emerged that are independent from the car companies and try to leverage on loopholes or weaknesses of the existing dealer networks. Major weaknesses of the exclusive distribution networks are:

- Overcrowded markets with too many dealers with high capital costs for their site and their inventory, selling too few cars a year and thus operating with very low operating margins [[7]].
- Old fashioned sales techniques and inferior quality of service. The quote about AutoNation underscores that some independent dealers have reinvented auto sales by applying sales techniques from consumer goods to autos. "Huizenga has designed AutoNation to respond to long-standing complaints about traditional dealers. Store amenities include children's play areas and computer kiosks displaying pictures and descriptions of the cars in stock. ... Cars can be returned in seven days, no questions asked, and carry a comprehensive 90-day war-

ranty." [[13]]

- National or regional price discrimination is substantial and the lack of market transparency have annoyed customers who realized that they have paid more then necessary and have opened a niche for arbitrageurs.
- The established governance structures made it difficult for the exclusive distribution networks to innovate their service offerings and to diversify into new distribution channels and manage them properly [[24]].
- Regulators, e.g. in the EU, have become increasingly critical about exclusive contracts for car distributors.

Before we are looking into strategic options for the car companies and their exclusive dealers, we will scrutinize the strategies of the new competitors.

4. Emerging Auto Cybermediaries: Innovative selling propositions and the impact of the Web

The	global	telematics	infrastructure	facilitates	addi-
-----	--------	------------	----------------	-------------	-------

	Example	Products and services	On-line services	Access	Service provider background
1)	AutoNetwork	new and used cars	access to inventory information, financing, negotiation, possibility to initiate buying process	open	new entrant (with background in auto- motive industry)
	Auto-By-Tel	new cars and financing	price information, establishes phone links to dealers, possibility to initiate buying process	open	new entrant (with background in auto- motive industry)
	DealerNet	comprehensive vehicle information and links to dealers	vehicle information, comparison, price quotes, possibility to initiate buying process	open	new entrant (subsidi- ary of Reynolds)
	CarSmart	new and used cars	vehicle information, comparison, price quotes, possibility to initiate buying process	open	new entrant (with background in auto- motive industry)
2)	AutoVantage	discounted products, among them new and used cars	information broker, establishes link- age between buyer and seller	members only	new cybermediary, spin-off of Shopper's Advantage
	Edmund's Automobile Buyer's Guide	new and used cars	information broker, reports, official price lists, price comparison	open	publisher
	CarPoint	new and used cars	information broker, reports, official price lists, price comparison	open	new entrant (Micro- soft)
	Look4Cars	platform for car dealers	service to locate the nearest car dealer and establish contact	open	co-operation of deal- ers
	Kelley Blue Book	auto information site: new and used cars, trucks, vans	auto pricing and value information	open	publisher
	WWWheels	new and (exotic) used cars	information site for auto enthusiasts	open	new entrant (software house)
	AutoWeb	new and used cars	link between customers, dealers and parts manufacturers, possibility to initiate buying process	open	new entrant (with background in auto- motive industry)

Table 1: Synopsis of automotive cybermediaries - cf. Selz and Klein [[25]] 1): Automotive Service Brokers, 2) Automotive Information Brokers

tional functions that have not been covered by established dealers, in particular interregional price and service comparisons. The new agents use arbitrage mechanisms and provide this information at a premium to the final customer [[5]]. The players allow price and service comparisons within the product range of a single manufacturer ers. There is an obvious threat to current dealerships if the practice of on-line quoting will spread widely.

4.1. The case of DealerNet

DealerNet is probably the most comprehensive cyber-

but increasingly offer side-by-side comparisons of different manufacturers of cars in the same category. As a result, online suppliers of information about cars, car related material and car sales have emerged at an astonishing pace in the last year and a half. Selz and Klein [[14]] identified two broad categories (cf. Table 1) of online dealerships: Automotive service brokers and automotive information brokers.

> • Automotive Service Brokers are companies as DealerNet and Auto-By-Tel that offer on-line information, pricing

Success Factor	Explanation	Intended effect		
Market penetra-	Number of customers with a clear	A stable customer base		
tion (critical	focus on the target group, number			
mass).	of transactions, generation of cus-			
	tomer contacts.			
Breadth and	Degree of differentiation and pre-	Attractive for customers. At-		
quality of the cise customer targeting.		tracting attention.		
information	Continually updated information of			
supply.	binding character.			
	Ease of use and integration of het-			
	erogeneous and external sources.			
Added value.	One-stop-shopping and total care	Differentiation from competitors		
	concept.	(established channels) through		
	Market transparency: comparisons	higher functionality and better		
	of products.	service.		
Efficient service	Cooperation and distributed service	Differentiation from competitors		
production.	production.	(established channels) through		
	Cost savings through optimization.	more efficient services.		
Cooperative	Secure favorable access to the	Differentiation from competitors		
service provi-	critical (information) resources.	(established channels) through		
sion.	Platform for dealers with estab-	better management of coopera-		
	lished physical infrastructure, name	tions, reliability and critical re-		
	recognition, customer base etc.	sources.		

Table 2: Critical success factors of DealerNet

and on-line quoting, additional services like finance, insurance, etc., and a direct link to a car dealer in your region or of your choice.

• Automotive Information Brokers are companies such as Kelley Blue Book, AutoVantage, Look4Cars. They offer on-line information, pricing and a broker service to bring together potential buyer and seller. But they do not offer the possibility of on-line quotes or additional services. They are pure automotive information brokers.

On-line auctioneers are a third category. Their business, however, has so far been limited to professional dealers.

All services are free of charge for the potential customers except for AutoVantage and for some vehicle pricing reports. The services are paid for by subscribing dealers and advertising. Most of the services enlist as main advantage the direct and undisturbed access to automotive price and value information. The argument that a customer does not need to encounter a salesperson is far reaching. The established distribution channels, salespersons and sales procedures seem to alienate many custommediary in the automotive sector [[23]]. It is packed with vehicle information, photos, specifications, side-by-side comparisons and on-line price quotes. It contains links to over 700 dealers in the USA. The example of DealerNet exhibits comparative advantages and disadvantages of the emerging cybermediary. We identified the following success factors of DealerNet (Table 2).

If these critical success factors are compared to the actual situation and tasks of the established dealer network, the outcome suggests that a cybermediary may effectively take over much of the functions and roles of the established channel.

An intermediary like DealerNet may extend its role to embrace additional functions of the traditional value chain. In fact, with the exception of the physical processes like test driving, delivery and servicing the car, DealerNet is able to provide all functions that the traditional chain distributes over three different layers.

4.2. Specific impact of the Web

	Roles	Car manu- facturer	National sales organiza- tion	Dealers	DealerNet
1)	New cars: product information and prices	1			~
	Configuration of vehicles	~	1		✓
	Buying conditions	~	1	(•	✓
	Used cars: product information and prices			1	~
	Product comparisons			1	✓
	Special offers			1	✓
	Advise			~	✓
	Customer database		1	<i>\</i>	√
	Vehicle database		1	1	✓
2)	Test drive			~	(✔)*
	Additional services (e.g. finance, insur- ance)		(✔)	(✔)	-
	Contracting			1	√
3)	Delivery and finishing of car			1	(✔)*
	Take over by customer			1	(√)*
	Guarantee services			1	(√)*
	Customer service			1	√/(√)*
	Maintenance			1	√/(√)*
	Spare parts and accessory parts			~	√/(√)*
	Follow-up / Customer satisfaction meas-			1	√/(√)*
	ures (e.g. customer newsletter, bonus systems, events)				
	Mobility services (e.g. car sharing, virtual product presentations, bundle offers in combination with public transport)			1	√ /(√)*

Table 3: Functions and roles of DealerNet* DealerNet can arrange this with the help of an associated dealer,1) Information Phase, 2) Agreement Phase, 3) Settlement / After Sales Phase

In contrast to digital products, vehicles require a physical infrastructure for storage and distribution. However, the Web is used to make the sales process more efficient, to provide convenience and total care concepts (from comparative vehicle information to financing and insurance) and to enable different types of interaction between dealer and buyer.

Auto cybermediaries have built extensive Web-based information platforms - often linking the offerings of multiple dealers-, to facilitate product comparison, to establish communication links between buyers and sellers and to enable transactions (or at least their preparation) without the necessity to physically move either people or vehicles [[15]].

Although arbitrage mechanisms have been available for a long time, the Web has been used to leverage these mechanisms:

• More and better information is provided, such as vehicle reports by independent consumer associa-

tions and interest groups, direct product and service comparisons, etc.

- A more comprehensive coverage of the market reduces the risk of customers to overpay. A Web based dealership will immediately be able to tap a vast reservoir of potential customers, say the whole of North America, and may thus realize substantial economies of scale in the information provision and interaction with the customers (e.g. no expensive physical showrooms).
- It is easy to link with providers of value-added (mobility) services such as car insurance, finance, car

pooling, maintenance centers, etc.

• The buying process is customer initiated and driven. There are no overly eager sales representatives and no price haggling. According to the Wall Street Journal [[2]] the automotive buying patterns in the US already changed dramatically: Today 15% of all buyers of a new car first inform themselves on the Web. Web sales of cars amount to 3% of total sales.

In sum, the Web has enabled new players to use regional and national price differences as a lever to make inroads into an contested market. Unlike digital products, cars cannot be sold purely using the Web. Nevertheless, the high level of information cost to get some transparency in the established market and potential price saving of a couple of hundred or even thousand USD motivates potential customers to take the trouble and consult the Web. The division of labor between dealers and information brokers as well as extensive and fairly comprehensive information collections help to build the trust of customers in an intangible medium.

Given the increasing influence of the Web and exacerbating channel competition, what are the strategic options for car manufacturers to retain the control of the distribution and service channel and at the same time reduce its cost?

5. Strategic options to fight back: the case of Mercedes-Benz

Mercedes-Benz, like most manufacturers, has organized its distribution channel in a three layered hierarchy. The first level is Mercedes-Benz itself, its research & development facilities, central marketing & sales services and the factories. The next layer consists of the national sales organizations (NSO), e.g. Mercedes-Benz (Switzerland) Ltd. The NSO have two functions. First, they complete on behalf of Mercedes-Benz the finish of new cars, e.g. equip with country specific features. In their second function they provide country specific central services: They are responsible for country-wide marketing campaigns, market research, customer database, country specific features (e.g. a 100.000 km unlimited guarantee in Switzerland). Together with Mercedes-Benz they decide the pricing strategy in that particular country. The last layer are the local car dealers. They sell and service new and old cars and are the key link to Mercedes-Benz customers [[23]].

As we have argued, the vertically integrated distribution chain - characteristic for most of the current industry - has become vulnerable to new competitors and needs to be readjusted or refocused. As we have shown, the distribution infrastructure has become part of a complex and interdependent bundle of product and service offerings. Figure 3 gives a stylized summary of IT enabled strategy elements:



Figure 3: IT enabled strategy elements

5.1. Products and services

As the requirements of our society – and hence the future clients – move towards increased individual liberties and mobility,

"...Mercedes-Benz observes therefore a strategy to see traffic in its entirety and to offer as complete transportation solutions. ... It is our goal to satisfy all of our customers' mobility requirements with an optimal offer of products and services" [[6]].

Mercedes Benz is responding to the changing competitive landscape and changing customer behavior by redefining their business scope. Rather than just being a car manufacturer, Mercedes Benz defines itself now as an *integrated mobility company*. It is redesigning its business in terms of "offering complex mobility" services instead of just "selling vehicles". This requires the introduction of new services and a permanent service innovation. In addition, Mercedes Benz has to determine new revenue streams to guarantee and maintain a healthy dealer network [[4]].

In the future, more of the value of a product will be designed outside of the firm. Customers will design a greater part of the product. They evaluate their mobility needs and will be offered by the automotive manufacturer, who is transforming from an assembler of vehicles to an assembler and coordinator of complex mobility services, a tailored service package. This synthesis of the notion *value* will differ from the traditional concept of value added.

5.2. Pricing strategy: The limits of differential pricing in the time of Cybermediaries

Establishing a coherent pricing strategy is one of Mercedes-Benz' most urgent problems. In fact, prices for exactly the same model, say an E-class model vary from approximately \$49'000 in the USA up to about four times this price in some Asian countries. These huge price differences reflect the social status of a Mercedes-Benz, the market structure, and Mercedes-Benz' competitive position in different national markets. In an increasingly global economy, price discrimination becomes more difficult to sustain for two reasons. First, your customers might be seriously offended once they realize the amount of price discrimination if you charge very different rates. Second, with a liberalization of international trade vehicles can be imported from the country where they are cheapest. By maintaining huge price differences, the car manufacturers are inviting third party arbitrageurs to set up their business. Consequently the exclusive dealers will loose some of their business and the manufacturers part of their control over the distribution channel.

5.3. Distribution infrastructure

The distribution infrastructure has to mirror the changing product and service strategy [[12]]:

- Virtual showrooms have been set-up in order to give comprehensive product information to customers and support the process of configuring options. These showrooms are used at the same time to establish a relationship with potential customers and to attract new customer groups, especially for new models like the SMART, the A- and Mclass.
- Additional information services and service offerings are promoted via the Web in direct competition with car cybermediaries.
- The establishment of closed user groups, building on the notion of online communities [[1], [27]], might help to isolate at least part of the service offerings from the immediate access of competitors.
- The Web is used to set-up extranets for the exclusive dealers in order to support their activities. BMW, e.g. has set-up a virtual marketplace for used cars covering all cars that are available at BMW dealers.

5.4. An integrated scenario: The Mobility Intermediary

The scenario of a mobility intermediary combines the insight gained from the research on cybermediaries with the vision of Mercedes-Benz as an integrated mobility company. We believe that an attractive and well designed mobility offer will convince prospective customers and establish an increased customer loyalty.

An integrated mobility service needs to meet the following goals:

• *Satisfied customers* must be the overriding goal of such a strategy. Our findings clearly indicate that currently a large customer base, trend growing, is

unhappy with the service quality and treatment received.

• *Profitable dealerships* are important to guarantee and maintain a high level of service to all customers in the long-term. Only an economically healthy dealer network will allow a car manufacturer to create a brand loyalty and generate satisfied cus-



Illustration 1: The car dealer evolves into a Mobility Adviser.

tomers.

- An *intensified*, *yet cost-efficient customer relationship*. The goal is a regular interaction between dealer and customer despite reduced service intervals of the vehicles. This interaction allows the offer of additional services [[16]].
- Large market penetration and reach allow the exploitation of economies of scale and a better profitability of the whole distribution channel.
- An *economically and ecologically better utilization* of the current car fleets and mobility services.

The essence of the proposed strategy of a "Mobility Intermediary" is to establish a long lasting relationship with a customer by providing extended mobility services. Like the petrol stations changed from re-sellers of gas to complete shopping centers, a local dealer would be able to offer next to the sale and service of cars a wide range of mobility services. The center of this idea is a one-stopshopping solution, a unique point of sales, that offers all services concerning mobility (cf. Illustration 1).

Together with a customer, the car dealer evaluates the mobility needs and in his role as mobility adviser proposes a complete mobility package. A mobility adviser will not be able to possess all of the required knowledge nor offer all of the required services. The cooperation partners will close that gap:

- *Finance:* In the case of Mercedes-Benz, the firm owns a leasing and financing company Debis. Attractive financing packages may be designed as mentioned below.
- *Insurance:* Car and passenger insurance is a necessary part of a complete mobility package.
- *Other services:* We distinguish between in-house service, e.g. shopping possibilities during the servicing of a car, and external services like for example a possible membership of an automotive association.
- Global service provided by national sales organizations: It is important that a customer receives the same standard of services all around the country. The national sales organization is probably best suited to provide a central customer and vehicle database available to all associated dealers. These services are offered already by some car manufacturers, e.g. the Saturn division of GM.
- *Third parties:* Especially in Europe the public transport service should be integrated in such a concept. Renault of France pursues such a possibility. It may also include mobility services at remote places during business or leisure trips.
- *Other dealers:* A mobile customer wishes to receive a mobility service all around the country and eventually abroad. To serve him at all times in all places a close network among dealers is necessary.

Offered on the Internet, it will allow to establish links between customers and dealers. The concept goes much beyond the current on-line storefronts of all major car manufacturers. The asset of such a service is a value proposition that extents the concept of owning a car. Micro Compact Cars (MCC), the joint venture between Switzerland's Swatch group, SMH, and Mercedes-Benz for the production of the new Smart car, will offer a leasing package to include rent of a larger car for the couple of weeks in a year when a purchaser might want more seats and luggage room. Such a service might be marketed at a premium price to reflect the added value the customer perceives and to compensate the dealer network for its increased efforts and costs in providing it [[19], [29]].

The car firms and their associated dealer networks may be good positioned to manage such systems. The complexity of this task, privileged access to the customer base through the product and service offerings might put the manufacturers into a competitive advantage in relation to independent dealer networks and cybermediaries. However, this advantage remains volatile as services offered on the Web are visible to the competitors and might invite counter moves by them.

5.5. Managing alliances in a competitive ecosystem

"The growing importance of ecosystems brings along with it another major change: competition as we've known it is dead. Not that competition is vanishing. In fact it is intensifying. But we need to think about it differently. The traditional way to view competition is in terms of products and markets. Your product or service goes up against that of your competitor, and one wins. That's still important, but this point of view ignores the context the environment - within which the business lies. Companies need to co-evolve with others in the environment, a process that involves cooperation as well as conflict. It takes generating shared visions, forming alliances, negotiating deals, and managing complex relationships." [[18]]

The quote by Moore emphasizes the changing structure of competition which also applies to auto industry and in particular auto distribution. As value propositions on the Web are more visible, they induce much faster responses - often imitation or even improved offers - by competitors. While the car companies are trying to use the lever of a physical product and the necessity of a physical infrastructure in order to provide integrated services and retain some of their control, they nevertheless have virtually no control over cybermediaries. Gray markets are emerging and destructive intra-channel price competition is a real threat.

Mercedes-Benz like other car companies need to transform themselves into assemblers of complex mobility services by coordinating networks of service providers and integrating Web services. They have to carefully manage the emerging multi-channel distribution network and face the challenges and risks of intra-channel conflicts, failure to reach critical mass with the new channel. and the sheer complexity of such systems [[24]]. While the car companies have learnt to coordinate complex supplier networks they have to learn in the future to apply this competence to the configuration and management of complex distribution and service networks with (more) independent service providers, assembling and coordinating complex and computer-enabled networks of intermediaries (service organizations with different contractual obligations) in order to provide mobility services.

6. Conclusions

The paper illustrates the impact of the Web in changing the landscape of car distribution:

- While most car companies seized the opportunity to establish virtual showrooms on the Web and extend their (information) service offerings to their customers, cybermediaries have emerged that are successfully exploiting weaknesses of the car companies and their establish distribution infrastructures.
- As auto cybermediaries are providing interregional and international price transparency and are teaming up with independent car distributors, some of whom have been redefining car sales in terms of consumer goods, the pressure on the exclusive dealers is rising and the car companies are losing control over the distribution network.
- Nevertheless, control over the product and part of the distribution and service infrastructure are levers for the car companies to retain or regain some of their control. We have sketched a scenario of extended mobility services that is incorporating IT in order to design superior service propositions. However, the car companies may have to forge new alliances with independent partners in order to compete successfully against new and agile cybermediaries.

7. References

- Armstrong A., and Hagel J., "The Real Value of On-line Communities", *Harvard Business Review*, May-June 1996, pp.134-141.
- [2] Bank D., "Microsoft Moves to Dominate On-Line Sales", *The Wall Street Journal Europe*. June 6-7, 1997, 5.
- [3] Benjamin R., and Wigand R., "Electronic Markets and Virtual Value Chains on the Information Superhighway" *Sloan Management Review*, Winter 1995, pp.62-72.
- [4] Business Week "The New Mercedes", *Business Week*, August 26, 1996, pp.34-38.
- [5] Business Week "Making Money on the Net", *Business Week*, September 23, 1996, pp.44-52.
- [6] DB-High Tech Report "Mercedes-Benz", Stuttgart, April 1996, p.23.
- [7] Dudenhöffer F "Restrukturierung von Vertriebsnetzen: das Beispiel der Automobilindustrie", *Marktbearbeitung und Distribution* (Belz C and Tomczak T, Ed), Thexis, St.Gallen, 1997, pp.174-189.
- [8] Economist, "Taming the Beast; Living with the Car", *The Economist*, June 22, 1996, Survey Section.
- [9] Economist, "Luxury Cars in America", *The Economist*, August 24, 1996, pp.54-55.
- [10] Economist, "Car firms head for a crash", *The Economist*, May 10, 1997, pp.19-23.
- [11] Heijden, H.G.M. van der, "The Changing Value of Travel Agents in Tourism Networks: Towards a Network Design Perspective", *Information and Communications Technolo-*

gies in Tourism (Schertler, W.; Schmid, B.; Tjoa, A M.; Werthner, H. - eds.), Springer-Verlag, Wien; New York, 1996, pp.151-159.

- [12] Jirikowsky U., "Mercedes Benz AG in T-Online und Internet", *Informatik/Informatique*, 3 (6), 1996, pp.26-28.
- [13] Kerwin K., and DeGeorge G., "Hurricane Huizenga He hurtles to the front of the pack in auto superstores", *Busi*ness Week, February 24, 1997, pp.46-49.
- [14] Klein S., Interorganizationssysteme und Unternehmensnetzwerke. DUV, Wiesbaden, 1996
- [15] Lee, H.G., "Electronic Market Intermediary: Transforming Technical Feasibility into Institutional Reality" *Proceedings of HICSS 1997, Vol. IV.*, IEEE, Hawaii, 1997.
- [16] Ludvigsen K.E., Kundenorientierung in der Automobilbranche, Verlag Moderne Industrie, Landsberg am Lech, 1995.
- [17] Malone T.W, Yates J., and Benjamin R.I., "Electronic Markets and electronic hierarchies", *Communications of the ACM*, (30), 1987, pp.390-402.
- [18] Moore J., *The Death of Competition*, Harper Business, New York, 1996.
- [19] Nault B.R., and Dexter A.S., "Added Value and Pricing with Information Technology", *MIS Quarterly*, December 1995, pp.449-464.
- [20] Porter M., and Millar V., "How information gives you a competitive advantage" *Harvard Business Review*, July/August 1985, pp.149-160.
- [21] Rayport J., and Sviokla J., "Managing in the Marketspace". *Harvard Business Review*, November/December 1994, pp.141-150.
- [22] Sarkar M., Butler B., and Steinfield C., "Intermediaries and Cybermediaries: A continuing role for mediating players in the Electronic Market", *Journal of Computer Mediated Communication* (JCMC), Issue 3, 1996.
- [23] Schad H., and Selz D., "Mercedes–Benz Distributionsstrategie –Strategische Potentiale des Internet", Working Paper IM HSG/CCEM/43, University of St.Gallen, St.Gallen, 1996.
- [24] Schlögel M., Mehrkanalsysteme in der Distribution. Rosch-Buch, Schesslitz (Disseration University of St.Gallen), 1997.
- [25] Selz D., and Klein S., "Emerging Electronic Intermediaries - the Case of the Automotive Industry", *Proceedings of* 10th Bled EC Conference, Bled, Slovenia, 1997, pp.316-336.
- [26] Schwarz K., Car Wars: Die Automobilindustrie im globalen Wettbewerb. Peter Lang Verlag, Frankfurt am Main, 1994.
- [27] Valauskas E.J., "Lex Networkia: Understanding the Internet Community" *First Monday*, Issue 4, http://www.firstmonday.dk/issues/issue4/valauskas/index. html, 1996.
- [28] Womack J., *The Machine that changed the World*, Rawson/MacMillan, NewYork, 1990.
- [29] Yadev M.S., and Berry L.L., "Capture and Communicate Value in the Pricing of Services", *Sloan Management Review, Summer*, 1996, pp.41-50.