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**Sarkar, Butler & Steinfield (1995) “Intermediaries and
Cybermediaries” Revisited:
A Review and Identification of Future Research Directions
for Intermediaries in Electronic Markets**

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Abstract

Intermediation in markets is a phenomenon that has been studied by many researchers from a variety of different theoretical angles. With the introduction and diffusion of the Internet in everyday life, broad predictions were made that called for disintermediation enabled by direct Internet linkages between suppliers and buyers and lower transaction costs. The often-cited paper by Sarkar, Butler and Steinfield (1995) challenges this prediction. By comparing Internet effects on transaction costs with the cost situation ex ante, the paper explains that both direct sales or cybermediated sales are possible outcomes. In this paper we confront key assumptions of the Sarkar et al. paper with recent developments in the tourism market. We find that in the tourism market a multitude of direct and indirect distribution channels exist next to each other. Multi-level distribution channels often including several cybermediaries have been built, resulting in a complex market topology. We also see a large variety of intermediary roles, resulting from highly specialized and highly integrated cybermediary business models. Furthermore the model of Sarkar et al. fails to deliver an explanation for the on-going dynamics in the tourism market in terms of shifts towards more or less intermediaries and the emergence of new intermediary-like business models. By taking these trends into account we are able to identify relevant future research directions in order to extend our understanding of the phenomenon of electronic intermediaries in markets.

Keywords: Cybermediaries, Intermediation, Electronic Intermediaries, Electronic Markets, Disintermediation Hypothesis, Tourism Industry

1 Introduction

The terms ‘cybermediary’, ‘electronic intermediary’, ‘electronic intermediation’ and ‘disintermediation’ are widespread and frequently used in the field of e-business research (Dai & Kauffman, 2002; Fielt, 2006; Giaglis, Klein, & O’Keefe, 2002; Novak & Schwabe, 2009; Rensmann & Smits, 2008; Rossignoli, Carugati, & Mola, 2009). Especially the term ‘cybermediary’ has become quite popular since its introduction by Mitra Barun Sarkar, Brian Butler and Charles Steinfield in their influential (566 citations according to Google Scholar) 1995 paper on the continuing roles of mediating players in electronic marketplaces (Sarkar, Butler, & Steinfield, 1995). The paper is a response and indeed rebuttal to the so called “disintermediation hypothesis”, a broad prediction that was made since the end of the 1980s by several researchers and that forecasted the disappearance of intermediaries due to lower transaction costs when two market participants interact directly over the Internet. Sarkar et al. (1995) in their response argue that in contrast to these claims for disintermediation, intermediaries still play a role in electronic marketplaces and might, under certain circumstances, become even more important than their non-electronic counterparts. To prove their claim, they use a dyadic transaction model that depicts a transaction between a buyer and a seller in comparison with a transaction between a seller and an intermediary and between an intermediary and a buyer respectively. However, their model makes simplifying assumptions about environmental factors and behavioral patterns of market participants. This limits the explanatory scope of the model.

Therefore the goal of this paper is twofold: First of all we want to recapitulate Sarkar et al.’s arguments and try to identify key assumptions in their line of reasoning. We illustrate our points by examples from the tourism industry, which exhibits multiple facets of intermediation. Thus the tourism industry provides a rich environment to study the phenomenon of intermediation in electronic marketplaces. Moreover, we have reviewed the existing body of literature on intermediation. By following this approach we deliberately increase the level of model complexity in order to achieve a more differentiated understanding of the phenomenon of IT-enabled intermediation. This leads us to the second contribution of this paper, the identification of future research directions addressing interesting and little explored aspects of electronic intermediation.

The paper is structured as follows: In section 2 we will recapitulate the paper of Sarkar et al. (1995). In section 3 we extend the model by contrasting central assumptions with examples from the tourism industry and recent research. Section 4 discusses the findings and makes future research suggestions. Section 6 concludes the paper.

2 Sarkar, Butler & Steinfield, (1995)

The paper of Sarkar et al. (1995) addresses the “disintermediation hypothesis”, which forecasted the disappearance of intermediaries in markets due to the advent of ubiquitously available electronic networks where buyers and sellers meet and transact directly¹. Advocates of the disintermediation hypothesis have used a transaction cost rationale, stating that market transactions via the Internet are cheaper in terms of

¹ Sarkar et al. (1995) use the term „National Information Infrastructure“ (NII) and compare the traditional situation (without the possibilities of the NII) with the situation where market participants can make use of the possibilities of the NII after its introduction. We set the term NII synonymous to ‘Internet’ and use the latter term throughout this article.

transaction costs than on traditional, offline markets. Malone, Yates and Benjamin, in their seminal 1987 article, predicted a general move to the market because IT reduces transaction costs and enables market participants to conduct transactions on electronic markets at comparatively lower cost than on traditional markets. Along with this, brokers would become dispensable, because electronic markets can fulfill many of the same functions like traditional brokers in connecting buyers and sellers. Malone et al. (1987) called this the “electronic brokerage effect” (Malone, Yates, & Benjamin, 1987). Benjamin and Wigand (1995) described how the information infrastructure might affect value chains and redistribute profits along them. They show with an example how the price of a shirt could drop by more than 60 % if wholesalers and retailers would be cut out of the value chain (Benjamin & Wigand, 1995).

Sarkar et al. (1995) modify and extend Benjamin and Wigand’s disintermediation argument. Two key assumptions are identified that formed the basis of prevalent analyses about threatened intermediaries. The first key assumption says that, with a ubiquitous information infrastructure in place, transaction costs are zero (insignificant) while the second key assumptions states that all transactions are atomic, i.e. not dividable into smaller units. Both assumptions have been recognized as problematic. Regarding the first assumption they state that it is very unlikely that all transaction costs are reduced to zero, but instead still incur non-negligible costs that are different for different classes of transactions.

Sarkar et al. (1995) apply a transaction cost-based rationale to prove in a semi-formal way that disintermediation is only one of four possible effects of an ubiquitous information infrastructure (see Figure 1). The model delineates dyadic transactions taking place between a producer of an unspecified product, a consumer and an intermediary. They show that there are four possible outcomes regarding intermediation, as illustrated in Figure 2 and briefly discussed hereafter (Sarkar, Butler, & Steinfield, 1995).

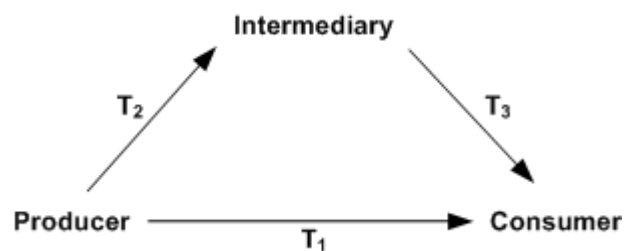


Figure 1: Model showing dyadic transactions between a producer, a consumer and an intermediary. Based on (Sarkar, Butler & Steinfield, 1995).

Scenario 1 in Figure 2 shows the possibility of a direct producer-consumer market that is reinforced by the possibilities of the Internet. Sector 2 depicts the scenario of disintermediation. Sector 3 represents a new breed of intermediaries that Sarkar et al. (1995) called “cybermediaries”. These IT-enabled intermediaries provide transaction-supporting services that enable market transactions at a lower cost than via a direct transaction between producer and consumer, even though such a transaction might have been cheaper before the possibilities of the Internet became available. Sector 4 describes

reinforced traditional intermediaries that use the possibilities of the Internet to supplement their existing market position.

		<u>Pre-Internet-era</u>	
		$T1 < T2 + T3$	$T1 > T2 + T3$
<u>Post-Internet-era</u>	$T1' < T2' + T3'$	1 <u>NII Supplemented Direct Market</u>	2 <u>Threatened Intermediaries</u>
	$T1' > T2' + T3'$	3 <u>Cybermediaries</u>	4 <u>NII Supplemented Intermediaries</u>

Figure 2: The four outcomes regarding intermediation in markets that result from a comparison of transaction costs before and after the advent of the Internet. Based on: (Sarkar, Butler & Steinfield, 1995).

Regarding the second key assumption of the disintermediation hypothesis, Sarkar et al. (1995) argue that transactions are not atomic and indivisible, but rather consist of different parts, which should be regarded in more detail. In order to support their argument they provide a differentiated list of cybermediaries' functions and transaction-supporting services.

3 Extending the Model of Sarkar et al. (1995)

Sarkar et al.'s (1995) paper was obviously not intended as an exhaustive analysis of the phenomenon of intermediation in electronic markets. The authors particularly point out that they use a simple model in order to prove their argument (Sarkar, Butler, & Steinfield, 1995). What the model fails to explain is, however, to what degree the predicted shifts are supposed to happen and what contextual circumstances lead to what outcome, or whether one outcome will dominate under certain circumstances. Furthermore it does not become clear how exactly the roles played by intermediaries or cybermediaries influence the relative cost advantages of the different outcomes, with implications to how an intermediary business model should look like that realizes these advantages or how a supplier should design a multi-channel distribution strategy.

The tourism industry knows many different kinds of intermediaries and provides plenty of evidence of dis-, re- and cyber-mediation. In the remainder of this chapter we will use evidence from the tourism industry for a critical examination of their model, in order to illustrate some of the above mentioned points.. We will also point to published research on intermediaries and intermediation. The following discussion focuses on three different aspects: Market topology, types and roles of intermediation in the market and market dynamics.

3.1 Market Topology

Sarkar et al. (1995) compare the transaction costs of a direct producer-consumer exchange with an intermediated exchange consisting of a transaction between supplier and intermediary and between intermediary and consumer. This simplistic view neglects the topology and nature of a market. The model depicts *one* intermediary, *one* supplier and *one* consumer. However, this is only an exceptional and rare case, because intermediaries typically provide a link between multiple suppliers and multiple consumers. Often there are also several intermediaries involved in fulfilling a customer's need. This results in a n:m:o topology. Werthner and Klein depict the tourism market as having a network-like topology, with the consumers (tourists) on one side and the suppliers (primary suppliers, e.g. airlines and hotels) on the other side (Werthner & Klein, 1999). The network in between consists of different classes of players with varying types of relationships: "The specific characteristic of travel and tourism is that on the supply side the industry acts as a network where different suppliers as well as intermediaries cooperate in order to offer the final product and to service the consumer" (Werthner & Klein, 1999).

For the sake of clarification we assume a one tier distribution system for now, involving retail intermediaries and a variety of different suppliers and customers with different preferences. A good example is the market for flight tickets with many different airlines as suppliers, travel agents or online travel portals as intermediaries and travelers being customers with different profiles (leisure vs. business travelers, luxury-oriented vs. budget-oriented travelers). In the following we describe different aspects that result from this extended topological view for suppliers, intermediaries and customers:

- **Suppliers:** The structure of the market influences the channel choice of a supplier (direct vs. intermediated). In a market like the airline ticket market, with a lot of competition and many intermediaries in the value chain, choosing the right channel strategy is crucial for the airlines. Many no-frills airlines like Ryanair or Easyjet choose to exclusively sell their tickets directly on their own company websites. Marketing channels might also be combined, using various intermediaries as well as direct selling in order to optimally reach customers with different preferences. The power of big online travel portals should not be neglected, as they provide search economies for customers and it is important for an airline to get a good position in the search results. Furthermore suppliers need to understand customers' needs and preferences, which often include the need for combining several suppliers in travel packages (flight + hotel + rental car) and a wide range of offers to choose from.
- **Intermediaries:** Intermediaries address customer needs as well supplier needs. For customers they provide, amongst others, comparison shopping, independent advice and assurance. An example is Travelocity, a travel portal that acts as a cybermediary connecting consumers with many different suppliers (flights, hotels, rental car etc.) (Inkpen, 1998). Supplier needs include market access, distribution efficiencies and the proper addressing of customer needs. Online travel portals like Travelocity fulfill these tasks, however, at a certain cost. Additionally intermediaries on the same level of the distribution chain compete against each other for suppliers and customers.

- Customers:** As indicated above, consumer needs in the tourism sector are usually fulfilled by a conglomerate of services provided by a variety of suppliers and intermediaries, some of which are complementary and dependent upon each other. I.e., there is a difference for a consumer when choosing between different suppliers for one and the same product (e.g. flight) or between different suppliers for different products (e.g. flight, hotel, rental car). The difference in complexity and search cost might influence the choice between an intermediated purchase via a travel platform, which integrates the different suppliers for a vacation, and direct interactions with the suppliers. Other factors that influence this choice are market structure and competencies of the customer. If the market is highly fragmented on the supply side, customers might prefer an intermediary, e.g. if travelers are looking for hostels or small hotels, which exist in a lot of different sizes and forms in big cities. In contrast, when booking a flight on a well-served route (e.g. Frankfurt – London), budget-oriented travelers might first look for rates at the websites of no-frills airlines. Older or less experienced travelers might not have the competencies or motivation to book their trip online and prefer the traditional brick-and-mortar travel agent with personal advice.

As we include these considerations into the transaction model of Sarkar et al. (1995), a more complicated model results. Figure 3 shows a market topology that includes multiple intermediaries, multiple customers (segments) and multiple suppliers for every service. Services (flight, hotel room, rental car) from different suppliers (airlines, hotels and car rentals) are necessary to fulfill a customer's need (e.g. a holiday trip). Different intermediaries are competing against each other, so the customer has to choose one or many to book his holidays. If the traveler is booking directly, she has to conduct three distinct transactions (T_{1a} , T_{1b} and T_{1c}). Suppliers have to take a lot more options into account when designing their multi-channel strategy. Different customer segments can be reached either directly, or via a multitude of intermediated channels, raising questions about customer relationship management.

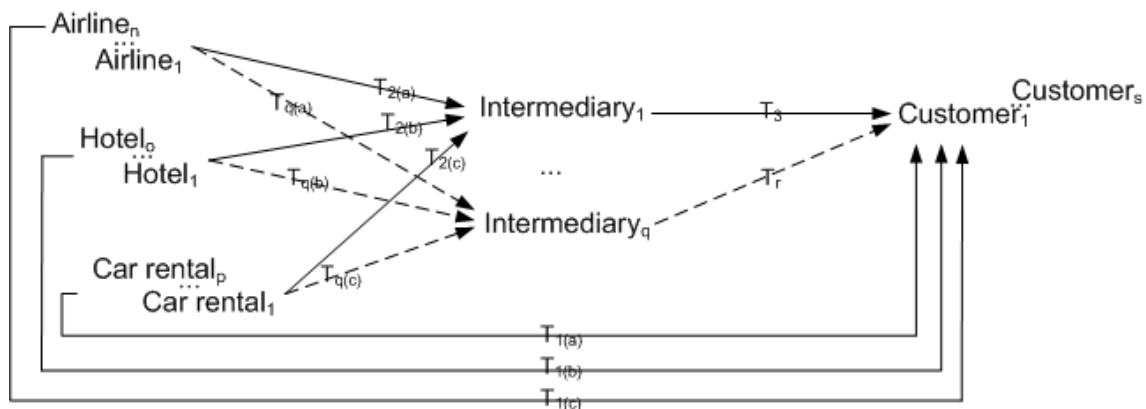


Figure 3: Extended model taking into account a more complex market topology.

The nature of the linkage between intermediaries and supplier and buyers is another point neglected in the model of Sarkar et al. (1995). Some intermediaries are suppliers' agents, some are customers' agents and others are neutral market agents. (Klein & Teubner, 2000). E.g. Sabre is an intermediary that initially connected travel agents with

primary suppliers (small hotels, providers of cultural and entertainment activities etc.). Sabre was founded by American Airlines (suppliers’ agent) and initially gave preference to American Airlines’ flights (Hopper, 1990; Riemer & Lehrke, 2009). The travel guide platform Lonely Planet acts as a buyers’ agent by providing recommendations and evaluations of tourism products and destinations to travelers².

3.2 Types and Roles of Intermediation in the Market

As indicated in the previous section, intermediaries play several roles in markets like product search, bundling, provision of market access and many more. It is important to note that the variety of roles that intermediaries play result from the complexity of different market topologies. On the other hand, relationships between intermediaries are subject to specific governance structures like cooperations. Thus additional criteria are needed to analyze the roles and added value (for the different market participants) of those intermediary constellations.

Choudhury and Konsynski (1998) analyze intermediaries in terms of transaction cost efficiencies and identify two different kinds of scale economies that intermediaries offer to buyers: search economies and exchange economies. A buyer can profit from *search economies* if her product mix uncertainty is high, which means that the buyer purchases a different product in each transaction and is uncertain of what product to purchase in the next transaction. Market variability leads to high search costs either if a market is highly fragmented or is highly volatile. An intermediary in a market realizes *exchange economies* by bundling different products from a variety of suppliers in one single transaction, thereby reducing the costs of the necessary information exchanges (Choudhury & Konsynski, 1998). This distinction between search and exchange economies provides a classification approach for classifying common services intermediaries are offering. Table 1 gives a non-exhaustive overview of services and examples from the tourism sector addressing search and exchange economies.

² <http://www.lonelyplanet.com/>.

	Roles	Example
Search economies	Search	Travelocity and Expedia are online travel supermarkets that enable search across a range of tourism products (flights, hotels, rental cars).
	Evaluations and ratings	By evaluating hotels and providing reviews about travel destinations, Travelocity and Expedia help customers finding the optimal balance between price and quality
	Needs assessment	Lonely Planet is a travel portal for young, independent and budget-aware travelers. It gathers a lot of information and travel recommendations about worldwide destinations on its web portal and helps customers to find a travel destination that matches their own travel style (all-inclusive, independent traveling, luxury, etc.).
Exchange economies	Bundling	Travelocity and Expedia bundle tourism products for customers, so that these can book their vacation on one single website.
	Product configuration recommendations	Online travel supermarket makes suggestions for product configurations, e.g. suggest a hotel near the airport of arrival when booking a flight

Table 1: Overview of common intermediary roles in the tourism market addressing search and exchange economies

The variety of different roles and the complex topology of the tourism market raise the question of the significance for the market participants. Booking platforms like hotel.de or hotels.com enable the booking of hotel rooms and act as transaction processors between the suppliers (hotels) and the customers. In contrast, a travel portal like tripadvisor.com only bundles price information about hotel rooms, but does not mediate the real booking. The business model of these providers is not based on raising a fee for handling the actual transaction, but on click-through commissions they receive from the booking platforms they refer to. A further difference needs to be made between service complementors and intermediaries. If a customer books a flight via a travel agent, it is usually only of little importance to him which player maintains the airport facilities, provides in-flight meals or the shuttle to the airport. These services complement the core product (i.e., the flight), however, if something goes wrong the customer might as well blame the travel agent (although the travel agent is not responsible). This illustrates the role an intermediary plays for the customer even beyond a certain market transaction.

There is a trend on the tourism market towards highly integrated platforms like online supermarkets on the one hand and highly specialized services in terms of service scope and customer segmentation on the other hand. Examples for the latter are the search engine qfly.com for discount airlines and luxurytravel.com for extravagant journeys. This leads to complex architectures of service and intermediary configurations and makes it difficult to compare intermediary types and roles. Comparison is especially difficult if services are provided in multiple steps, involving several intermediaries or service providers and if different business models are combined in order to integrate

additional services for customers. Airlines e.g. become intermediaries themselves by offering third party services complementing their own core product (the flight). Examples here are no-frills carriers like Ryanair or Easyjet, offering hotels, rental cars and insurances to their customers in the course of their booking process. This development can be characterized as an extension of the direct sales models, as shown in Figure 4.

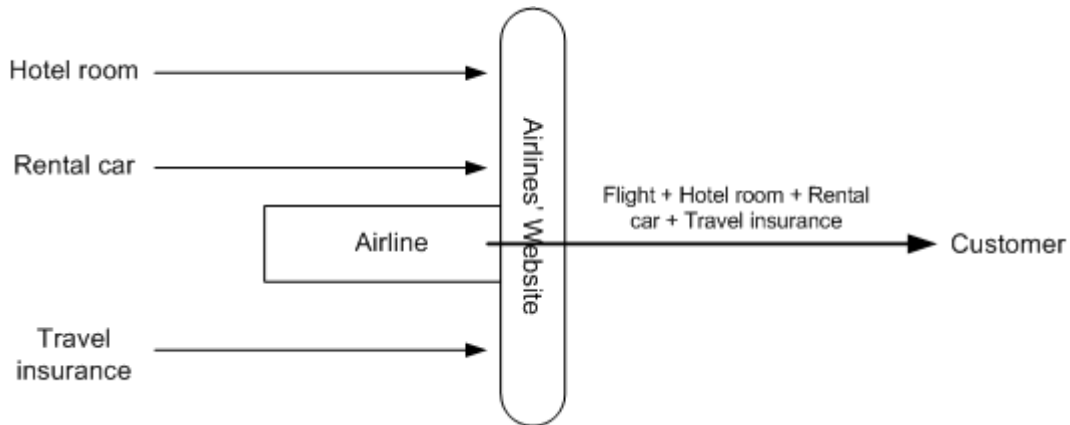


Figure 4: Airlines offer complementing services by third parties to their customers and thus fulfill an intermediating role.

Highly integrated and specialized business models lead to different transaction characteristics and multiple relationships between the players. While Sarkar et al. (1995) point to the fact that transactions are not atomic and that the single parts of the transaction can be supported by different cybermediary services, we find that actors carry out different *kinds* of transactions in the context of compound tourism services like a holiday trip. Complementing services can most often be booked separately. Airlines e.g. use upselling techniques which enable customers to upgrade their travel class, use priority boarding or be allowed to take extra luggage. Intermediaries, by selling complementing services like insurances or phone cards, also conduct different kinds of transactions. Figure 5 shows the resulting extended model.

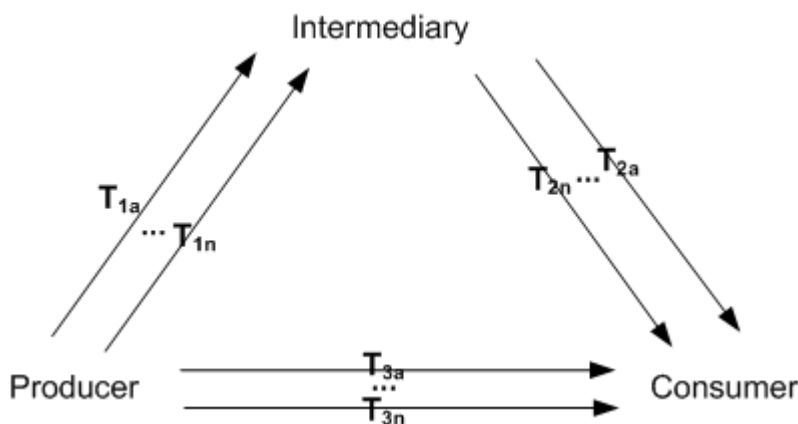


Figure 5: Extension of the Sarkar et al. (1995)-model with multiple transactional relationships, depicting different characters of transactions

3.3 Market Dynamics and Competition

The continuously changing intermediation structure in a market such as the tourism market is highly contingent on industry characteristics and the competitive market environment. Sarkar et al. (1995) implicitly assume some kind of dynamism by saying that there are four different outcomes possible with the Internet in place. However, they do not explain whether or not transitions are possible between the different scenarios in Figure 2, and if yes, what kind of transitions might occur under what circumstances. An interesting question would e.g. be, how threatened intermediaries can make use of the possibilities of the Internet in order to strengthen their market position (and thus move to sector 4). The lack of evolutionary aspects in previous work on disintermediation and its short-term character were also mentioned by other researchers. Chircu and Kauffman (2000) elaborate on these aspects in their “intermediation, disintermediation, and reintermediation-” (IDR-) framework (Chircu & Kauffman, 2000). They identify three distinct phases: The *intermediation phase*, the *disintermediation* phase and the *reintermediation* phase. These three phases occur, according to Chircu and Kauffman, in cycles and repeatedly with every e-commerce innovation that is introduced in a market. Intermediation means the entry of a new, IT-enabled e-commerce player (cybermediary) in a market, leading to the disintermediation of established players. Reintermediation occurs when an established player regains ground by the likewise utilization of e-commerce technologies, complementing its traditional business model (Chircu & Kauffman, 2000). When observing the rapid changes in the tourism industry that occurred over the last two decades it becomes difficult though to identify cycles or regularly recurring patterns of intermediation, disintermediation and reintermediation in this industry. Instead, different moves of different players that lead to inter-, dis-, re- or cybermediation of certain players happen at the same time and contribute to a continuously changing market picture.

Since the advent of cybermediaries like Travelocity or Expedia, the main street travel agent from around the corner became a threatened species. The declining number of traditional travel agents is a fact in many countries³. Many customers now configure their trips online. Cybermediaries like Expedia and other online travel supermarkets enable customers to build their own trip from a wide range of options, combining flights, hotels and rental cars according to their own itinerary⁴. Nevertheless, not only since the rise of no-frills airlines like Ryanair that sell tickets exclusively via their own website, airlines are trying to sell tickets directly to customers, using their own website as distribution channel, thereby bypassing cybermediaries (Inkpen, 1998). In response to intense price competition, United Airlines has even offered a best price guarantee on its Web site clearly aimed at establishing their direct sales as their primary distribution channel⁵. Another illustrative example is American Airlines, which has not renewed contracts with two intermediaries (Orbitz, Opodo) because it claims that the intermediaries do not properly endorse their new pricing model⁶. This phenomenon

3 In Germany, the number of travel agencies is declining since many years, see:

[http://www.driv.de/index.php?id=548&no_cache=1&sword_list\[0\]=travel&sword_list\[1\]=agents](http://www.driv.de/index.php?id=548&no_cache=1&sword_list[0]=travel&sword_list[1]=agents).

4 See <http://www.expedia.com/daily/packages/default.asp?rfr=-856790#featPkg>.

5 See

http://www.united.com/page/article/0,6722,51216,00.html?navSource=hp_benefits_features&linkTitle=Ifg.

6 See http://www.nytimes.com/2011/01/05/business/05air.html?_r=2&hpw.

could also be called "dis-cybermediation", which means that the cybermediaries, once seen as disintermediation threat, become threatened themselves.

Because airlines can offer consumers privileged access to their own products by running promotions, offering better seat assignment, cancellation policies, upgrades and frequent traveller awards, which are not available for travel intermediaries, their behaviour has been criticised as "predatory disintermediation". Predatory disintermediation aims at intensifying the competition in the industry and cutting out intermediaries by adapting the airlines' own distribution channel in a way that makes it impossible for intermediaries to compete with it (Berghel, 2000).

However, as more and more airlines establish their own, direct distribution channel, customers are faced with increasing complexity and search costs, making a complete disintermediation of cybermediaries and travel agents unlikely. On the contrary: Traditional travel agents apparently still play an important role in fulfilling customer's individual travel needs and there are plenty of examples of successful reintermediation. Many traditional travel agents now maintain their own websites with travel information and booking possibilities in addition to their existing network of stores⁷. Another phenomenon which was described by Chircu and Kauffman (2000) can also be observed in the tourism industry: The new intermediaries make their technologies and platforms available to other players in the market and thus turn into technology providers (Chircu & Kauffman, 2000). E.g. Sabre was founded as computer reservation system by American Airlines, offering flight reservation services to travel agencies. Nowadays Sabre is a versatile service provider serving travel agencies, corporations, governance agencies and suppliers⁸. Sabre also owns Travelocity, one of the large online travel supermarkets, which competes with the travel agencies.

The ongoing movements of the different players - intermediaries and tourism principals - reflect the intensity of competition in the fragmented and volatile tourism market. Intermediaries try to gain an advantage by negotiating exclusive deals with tourism principals. Hotel.de, for example, offers "best deals" with certain hotels or little extras, like a bottle of water, for customers that book their stay on hotel.de⁹. On an alternative hotel-platform, hrs.com, customers might get cheaper stays for various hotels, as hrs.com is promoting their "exclusive price", guaranteeing a price which is 10 % lower than with any other travel platform¹⁰.

These various examples illustrate the dynamic nature of the tourism market in terms of intermediaries with innovative business models entering the market, intermediaries exiting the market and the various competitive moves the players are engaged in in order to gain ground and reach the customer.

4 Discussion

The tourism industry is an example of a highly fragmented industry with multiple players at each level of the distribution chain. We find a co-existence of intermediation,

7 See e.g. American Express (<http://www.americanexpress.com>) and STA Travel (<http://www.statravel.com/>).

8 See http://www.sabretravelnetwork.com/home/products_services/product_index/.

9 See <http://www.hotel.info/homepage.aspx?lng=EN>

10 See <http://www.hrs.com>

disintermediation and an increasing number of cybermediation with a broad and differentiated range of value propositions and roles. This complexity creates the necessity to thoroughly distinguish between the different roles and perspectives of the market participants in order to analyze the benefits and drawbacks of intermediaries and the overall intermediation structure. Taking the perspective of a supplier, e.g. an airline, the question of selling directly to consumers or using an intermediated channel is one of choosing the right multi-channel-strategy. Most airlines pursue a multi-channel-strategy by using direct as well as intermediated sales via multiple intermediaries, with some even creating their own new intermediary channel (e.g. Orbitz.com or Opodo.com). On the other hand, we showed that many airlines are trying to strengthen their direct sales channel by using “predatory” means and sometimes even compete against their own intermediary spin-offs. From a customer’s point of view the question of buying directly from the supplier or using an intermediary is likely to be related to the complexity and the size of the search space relative to their own expertise and risk preference. When the choice of the airline is obvious due to the offered route (and price), customers are likely to go the direct way. Whenever customers want a comparison across different airlines (and alliances), cybermediaries can help to reduce search (i.e. comparison) costs. Experimental research might be a way to study consumer’s behavior in choosing an intermediary or going directly to the supplier.

From an intermediary’s point of view, in order to survive and thrive, it is not only important to be aware of the existing supply and match this to customer’s wishes (i.e., to have a good business model), but also to watch out for disintermediation threats coming from unexpected sides. Predatory disintermediation makes it very difficult for travel portals offering typical tourism services like flight and hotel booking to respond properly, as they simply cannot get access to the conditions the tourism suppliers are offering their clients directly. They need to find the right strategy to cope with this, which might be the introduction of better search services among many different suppliers or including travelers to improve services through e.g. customers’ reviews and recommendations. With some extreme examples of predatory disintermediation it might even be worth to check the matter with the anti-trust authorities. Another reason for the disintermediation of single intermediaries is competition amongst intermediaries. There is an intense competition between different intermediaries who offer travel agency functions online (online travel platforms) and those with specific business models, such as Priceline, which is offering a patented name-your-own-price model, or Tripadvisor, which is a platform particularly for customer generated travel information but also links to online travel agencies for quotes.

The channel structure in the tourism sector is changing rapidly and continuously due to the intense competition between the many different players in the industry. This forces the competitors – supplier and intermediaries alike – to constantly be aware of new technological and product-related innovations and to react quickly in case the own market position is at stake. It might be dangerous for suppliers or intermediaries to depend too much on the consumer, as opportunism and cherry-picking from a large range of offerings makes consumer behaviour rather unpredictable. Also with new developments like Web 2.0 and social networking at hand, consumers trust fellow travellers’ recommendations more than those of suppliers and intermediaries. In order to be able to analyze these issues, other viewpoints than the widely and often exclusively

used transaction cost theory should be taken to explain aspects of intermediation in markets, as suggested by Jin and Robey (1999). They e.g. propose the use of consumer choice theory (CCT) for analyzing the economic benefits of intermediaries. CCT states that consumers are producing final desires instead of just purchasing single goods or products. A vacation with the goal of relaxing can be such a final desire. However, the fulfillment of this final desire depends on a variety of complementing products and services that the consumer needs to purchase (e.g. flight, hotel, rental car, activities), the time and energy the individual spends for its "production", i.e. combination of the booked products (planning activities, preparing for the trip etc.) and the ability to do so (e.g. with the support of travel-guide portals like Lonely Planet). Jin and Robey also suggest other theories for analyzing intermediation like social network theories, knowledge broker theory and institutional theory (Jin & Robey, 1999).

In sum, the tourism industry has become a complex ecosystem of co-existing and competing models of intermediated and direct distribution. The level of competition reflects the number of relevant players at the respective stages of the value chain as well as upstream competition. Many of the outcomes can be explained (ex post) by using a transaction cost rationale, however, relative cost advantages for the respective players and transaction attributes (frequency, information asymmetry, uncertainty) need to be taken into account. Also previous work mainly focused on dyadic relationships and decisions of single players towards or against using an intermediary or on the business models of single intermediaries. Moreover, we found an enduring role of specific contingencies (operated routes, price policy, patented business models, ...), which reflect strategic choices of the economic actors.

What is needed are ways that enable a better analysis of the factors that drive or hinder intermediation in markets. In addition approaches to conduct a strategic analysis of the relevant market power of actors and the dependencies between them are needed. The American Airlines case (see chapter 3.3) illustrates the relevance of this problem.

Another problem is the complexity of intermediation and distribution structures which is closely related to issues of specialization, innovation and division of work. One way to manage this complexity might be through the use of typologies or configurations. The idea of configuration analysis is to identify a manageable number of archetypes or generic constellations – configurations - which describe a wide variety of existing actor constellations. Thereby these configurations take actors' strategies, the structure of the actor constellations and the environment into account (Miller, 1986). The goal of typologies is the identification of ideal types on the basis of different dimensions. The ideal types can be used as a standard of comparison for real world examples to compare them with and see how well they approximate them. A typology, if thoroughly identified and defined, is a theory in itself, which can be used to explain observed phenomena (Doty & Glick, 1994). Mintzberg's five organizational patterns are a well known example (Mintzberg, 1983). Analyzing intermediation at the level of configurations or ideal types would differ from the approach of analyzing decisions of single players in dyadic relationships (towards or against using an intermediary), which is the common stance taken when discussing intermediation in markets. By taking a broader stance, configurational analysis also allows to more accurately account for a multitude of intermediation contexts and their dynamics, a better recognition of

changing boundary conditions and the integration of multiple theoretical views (Lyytinen & Damsgaard, 2011). Furthermore it reveals the complexity from the perspective of different customer segments and enables a more thorough analysis of coordination costs customers are faced with. The same segment of customers might use different intermediation services in different situations.

5 Conclusion

The goal of this work was to recapitulate the paper of Sarkar et al. (1995) and to reflect its key assumptions using evidence from the tourism market. By taking more factors into account, we increase the complexity compared to the original model, which enables the identification of important issues that should not be neglected when discussing the phenomenon of intermediation in markets. Based on these issues, chapter 4 gave some suggestions for future research.

With respect to the model of Sarkar et al. (1995), it can be stated that no clear answer can be given to the question to what degree the amount of intermediation changes in a market (in terms of more or less intermediaries) as a result of the introduction of ICT as an exogenous force. What we see is that different distribution channels co-exist and that intermediaries are part of the multi-channel distribution strategy of tourism suppliers, next to direct selling strategies.

The evolution of intermediation in markets is also highly contingent on industry characteristics. Product and service characteristics influence the opportunities for cybermediaries and the evolution of the industry structure (Klein & Teubner, 2000). Tickets or bookings are non-transferable contracts that are not even written out on paper anymore (e-ticket). The fixed costs are often very high due to high investments in e.g. airplanes and hotel facilities. There are plenty of possibilities for product bundling and differential pricing, the product complexity can be high and the price sensitivity of customers varies (independent traveller vs. luxury-seeking tourist). This is a playground for intermediaries and offers plenty of opportunities for IT-based business models that support consumers in evaluating the different options and helps suppliers to find new sales channels for their products.

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