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Onno Truijens

University of Amsterdam, o.truijens@uva.nl

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Information Strategy at TravelCom: Searching for InfoRent in the Dutch Travel Industry

Onno Truijens
University of Amsterdam, The Netherlands

Abstract

This paper reports on a case study at a Dutch travel organization, named TravelCom. The study examines how TravelCom makes strategic use of information by means of their information strategy. In their information strategy, TravelCom decides how to realize InfoRent, i.e. economic rent as a result of solving or maintaining information imperfections in factor and product markets. TravelCom aims at increasing the transparency of factor markets for themselves, thereby maintaining any information imperfections that are disadvantageous for travel component suppliers. Whereas in their product markets, they maintain the existing market opaqueness, preventing consumers from easily comparing their products with those of competitors. At the same time, TravelCom attempts to increase the insight in customer demand by building customer profiles.

Keywords: information strategy, InfoRent, information imperfections, resource-based view, travel industry

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1. Introduction

This paper reports on an exploratory case study in the Dutch travel industry. It is the first of a series of cases that will be conducted. The case study is an inquiry into the way TravelCom¹, a large Dutch travel organization, attempts to realize economic rent (competitive advantage) by strategically exploiting information imperfections in travel markets. This type of economic rent is denominated as *InfoRent*, whereas the way to realize it is called an *information strategy*. The study is an attempt to substantiate and exemplify the theoretical development of these two concepts. Both *InfoRent* and *information strategy* focus explicitly on the role of information, and in specific information imperfections, in strategic factor (input) and product (output) markets in creating differences in firm performance.

The reasons for conducting this study are twofold. Firstly, the study serves as a first empirical test of the validity and applicability of the two theoretically constructed concepts in real-life organizations. The theoretical concepts and framework related to information strategy described in section 2, were explained to TravelCom. Subsequently, the members of TravelCom's strategic management team were asked to analyze their business in terms of the framework and to explain the choices made with regard to their information strategy. This explains the largely exploratory and descriptive nature of the case study. Secondly, the study is a first attempt to describe and explain how organizations attempt to realize economic rent by exploiting information imperfections by means of an information strategy. The aim is to gain insight in the organization itself, its context and surrounding market characteristics and the way this reflects in their choices in information strategy. Finally, the study could serve as a basis for formulating hypotheses about which circumstances lead to certain choices in an organization's information strategy.

The central research question with respect to the information strategy of the travel organization studied is:

How does TravelCom attempt to realize InfoRent by either maintaining or solving information imperfections in relevant strategic factor and product markets for travels?

In order to analyze the case study result, first a short overview of the theoretical concepts and framework is presented (section 2). Section 3 discusses the research methodology, the case study design and the research process itself. Then, section 4 describes TravelCom's position in the travel industry, the

¹ According to the confidentiality agreement, fictional names for both the concern and the subsidiary company are used.

organization itself, its mission, strategic guidelines and objectives, and basic value adding activities. Section 5 presents the analysis of TravelCom's information strategy in terms of the theoretical framework. The main results will be summarized and discussed shortly in section 6.

2. Concepts and theoretical framework

In order to provide a theoretical base for the concepts of *information strategy* and *InfoRent*, their definitions are derived from strategic management and rent theory, in specific the resource-based view of the firm (Penrose 1959; Wernerfelt 1984; Barney 1986).

2.1. Resource-based View of the Firm

The resource-based view incorporates several insights of strategic management in order to explain how firms outperform competitors. This view “perceives the firm as a unique bundle of idiosyncratic resources and capabilities where the primary task of management is to maximize value through the optimal deployment of existing resources and capabilities, while developing the firm’s resource base for the future” (Grant 1991, p.110). Penrose states that: “it is the heterogeneity (...) of the productive services available or potentially available from its resources that gives each firm its unique character” (Penrose 1959, p.75). The distinction between resources and services is not their durability, but the fact that resources consist of a bundle of potential services and can be defined independent of their use, while services cannot be so defined (Penrose 1959, p.25). A firm’s resources at a given time are those tangible and intangible assets which are tied semi-permanently to the firm (Wernerfelt 1984, p.172) like capital, equipment, skills and knowledge of individual employees, brand names and technological systems.

However, on their own, few resources are productive, which requires the cooperation and coordination of resources in bundles. This capacity of a bundle of resources to perform some task or activity is referred to as a capability. In order to make productive use of bundles of resources, organizations acquire the required resources at so called factor markets, as for instance the market for labor or capital. *Strategic* factor markets are defined as those markets where organizations acquire the necessary resources for implementing their product market strategy (Barney 1986, p.1231). In short, firms acquire resources at factor markets, bundle them and develop capabilities which make use of these resource bundles in order to make up a product or service, which is sold at one or more product markets. Figure 1 depicts an overview of this general train of thought in the resource-based view of the firm.

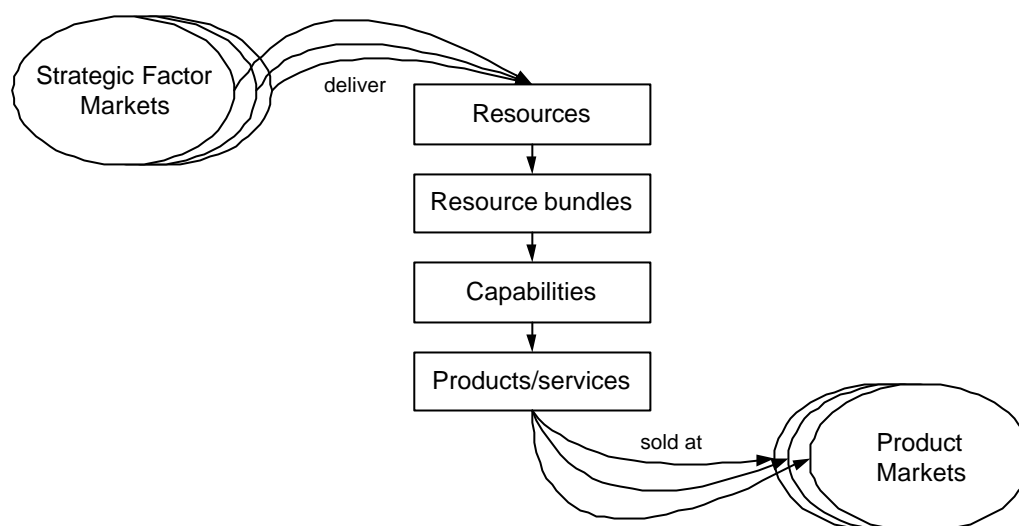


Figure 1 Overview of the Resource-based View of the Firm

2.2 Economic rent

Firms can realize economic returns by selling their products or services at product markets. In a competitive environment, a firm can outperform its competitors, because it owns better resources, or because the firm's distinctive capabilities make better use of its resource bundles (Penrose 1959, p.54). A distinctive competence is defined as a differentiated set of skills, complementary assets, and organization routines which together allow a firm to coordinate a particular set of activities in a way that provides the basis for competitive advantage (definition by Dosi and Teece in: Williamson 1999, p.1094). Competitive advantage is commonly referred to as rent in economics. Subsequently, the resource-based view sees strategy as a continuous search for rent. Rent is then defined as return in excess of a resource owner's opportunity costs² (Mahoney and Pandian 1992). In other words, rents can be measured as above-normal rates of financial return.

In order to differentiate possible sources of rent, several types are distinguished. For instance, rents may be achieved by (Mahoney and Pandian 1992):

- ☞ superior management capacity to coordinate resources (Penrose rent)
- ☞ owning a valuable resource that is scarce (Ricardian rent);
- ☞ government protection or collusive arrangements when barriers to potential competitors are high (monopoly rent);
- ☞ risk-taking and entrepreneurial insight in an uncertain/complex environment (Schumpeterian/entrepreneurial rent);

² The opportunity cost of a resource is the revenue it can generate when put to an alternative use in the firm or the price which it can be sold for. Grant, R. M. (1991). "The Resource-Based Theory of Competitive Advantage: Implications for Strategy Formulation." *Californian Management Review* 33(3): 114-125.

making first-best use of firm-specific resources, either idiosyncratic physical capital, human capital or dedicated assets (quasi-rent).

To sum up, the resource-based view is an attempt to explain why firms differ in terms of resources and capabilities and how these differences can lead to positions of sustainable rent, yielding superior financial returns. The resource-based view therefore serves the purpose of focusing explicitly on the role of the organization's resources and capabilities as the foundation of strategy and organizational performance. This exploration of the relationship between resources, competition and profitability includes, amongst other issues, the role of imperfect information in creating profitability differences between competing firms (Grant 1991, p.3), (Barney 1986; Itami 1987).

2.3 InfoRent

Information imperfections are but one of several competitive imperfections that dash the economic ideal of the perfect market. The perfect market is characterized by numerous buyers and sellers, a homogenous product, and the price mechanism as a 'sufficient statistic' to determine the most efficient transaction partner on the market. With regard to information, all market players are completely and perfectly informed about all relevant aspects of the transaction. While the ideal market serves as the most important assumption in neoclassical economic theory, contemporary economic theories tend to relax this rather unrealistic theoretical assumption. Therefore, it is assumed that the perfect market and perfectly informed market players are a myth. Therefore it is posed that markets are characterized by competitive imperfections, of which information imperfections are an important subset. (Yao 1988)

The amount of rent that can be realized by a firm depends on the cost of the resources, acquired at factor markets, and their economic value when sold in product markets. In case of these (factor and product) markets being perfectly competitive, buyers and seller both would have the same and perfectly accurate expectations about the value and costs of resources and products. Consequently, sellers will never sell their resource or product if the full value is not reflected in the price, nor will buyers pay a price higher than its costs. Under these perfect market circumstances, strategies can only yield *normal* returns, as opposed to above-normal returns, i.e. rent.

In order for economic rent to be realized, firms have to exploit competitive imperfections in strategic factor and product markets. Under the more realistic assumption that these competitive imperfections do exist, it seems realistic that different market players have different expectations about the value of resources or products. These differences in expectations arise, differences in the installed base of resources of firms, different ways in which resource can be bundled, but also from differences in information. In the case that information imperfections are exploited by market players to obtain better

expectations of the cost and value of resources and products, *InfoRent* results from it. Hence, *InfoRent* is proposed as a new type of economic rent in order to focus on the strategic relevance and rent-earning potential of information imperfections. Information imperfections are the essential sources of *InfoRent*: the main objective of information strategy.

2.4 Identifying information imperfections

In order to understand how *InfoRent* can be identified and appropriated by means of an information strategy, insight in the origin of information imperfections is required.

Transaction cost economics (TCE) describes these origins and the three types of information imperfections that result from them (Williamson 1975).

TCE theory ascribes two behavioral assumptions to humans: bounded rationality and opportunism. Humans are assumed to be intended rational but only limitedly so. Bounded rationality points out the inability of the human brain. It “involves neuro-physiological limits on the one hand and language limits on the other. The physical limits take the form of rate and storage limits on the powers of individuals to receive, store, and process information without error” (Williamson 1975, p.21). “Human cognitive capacities are as a rule insufficient for fully understanding especially complex tasks to recognize the relevant information need and to completely process all relevant information” (Wigand, Picot et al. 1997, p.75). Bounded rationality explains humans’ limited rational information behavior (Simon 1955). “Instead of a complete search for all relevant information, the decision-maker only tries to attain a subjectively satisfying, yet incomplete level of information” (Wigand, Picot et al. 1997, p.75). This kind of behavior is known as ‘satisficing’: searching for a solution that meets the decision-maker’s aspiration levels and is therefore acceptable.

Humans are not only bounded rational, they are also assumed to sometimes display opportunistic behavior. Williamson describes opportunism as “self-interest seeking with guile” involving “self-disbelieved threats and promises” in order to realize individual advantages (Williamson 1975, p.26). These advantages are either due to “selective and distorted information disclosure or self-disbelieved promises regarding future conduct” (Williamson 1975, p.26). The assumption is that, while not all humans behave opportunistically, it is difficult to predict beforehand whether they will or will not behave as such.

These two behavioral assumptions reflect on the way transactions between buyers and sellers in markets take place. The combination of opportunistic behavior and bounded rationality is the main cause for three types of information imperfections in market transactions:

Information asymmetry

A transaction with an asymmetrical distribution of information over the parties involved in a transaction causes a strategic opportunity. “The critical impact of information on the optimal allocation of risk bearing is not merely its presence or absence but its inequality among economic agents” (Arrow 1969, p.55). Williamson adds two conditions under which information asymmetry provides a strategic opportunity in transactions: (a) high costs of achieving information parity and (b) the proclivity of parties to behave opportunistically (Williamson 1975, p.31). In other words, information asymmetry occurs whenever one party has information that is unknown and difficult to retrieve for the other party, and provides an opportunity to exploit this information advantage for strategic purposes.

Information asymmetry can result in a favorable situation for either the buyer or the seller, depending on whoever has the information advantage. The opportunity is caused by hidden information prior to the actual transaction. One party in a potential transaction is better informed about a relevant variable in the transaction than the other party. It is the invisibility of this private information which constitutes the essence of the information imperfection and introduces the risk for the other party (Douma and Schreuder 1992, p.54). Taking into account the possibility of opportunistic behavior, the party possessing the hidden information has no incentive to reveal the information truthfully, if it would be detrimental to him. As a consequence, any seller that enters the market with a product or service that is particularly suited for a particular set of buyers, will end up with the buyers that benefit the most from their hidden information. This ex ante information imperfection is known as adverse selection (Arrow 1984).

Ambiguous information

Ambiguous information in a transaction causes a strategic opportunity. Even in the case of complete information symmetry, interpretation differences over the same piece of information can occur. As a result of opportunism, these representations can be opportunistic in the sense that they lead to individual advantage for either the buyer or the seller. The strategic opportunity for one of them unfolds when such an opportunistic interpretation is not recognized by the other and results in (1) a willingness of the buyer to pay a higher price for the product than without this opportunistic interpretation, or (2) a willingness of the seller to offer the product for a lower price than without this opportunistic interpretation. Accounting for opportunistic behavior, the party with the opportunistic interpretation that has no incentive to share this interpretation if it would be disadvantageous for him.

✍ Incomplete information

The strategic opportunity of incomplete information is closely related to the behavioral assumption of bounded rationality. “Bounds on rationality are interesting, of course, only to the extent that the limits of rationality are reached - which is to say, under conditions of uncertainty and/or complexity. In the absence of either of these conditions the appropriate set of contingent actions can be fully specified at the outset” (Williamson 1975, p.22). In a non-trivial environment, characterized by some degree of complexity and uncertainty, the possible outcomes of certain events quickly become numerous. Under these circumstances, it is impossible for humans to gather and analyze the complete set of relevant information for decision making. As explained earlier, this impossibility leads to ‘satisficing’ behavior. The strategic opportunity of incomplete information occurs when a buyer is incompletely informed about the range of possible transaction partners and their product offerings, and vice versa. Therefore, a buyer that consents to an incomplete comparison of sellers and their mutual differences, could end up in a transaction with a non-optimal seller. As a seller this opportunity can be exploited by establishing a brand name and advertising in order to become part of the subset of all sellers in the incomplete comparison of buyers.

2.5 Appropriating InfoRent

After having identified the information imperfections in both the relevant factor and product markets, organizations decide in their information strategy how to handle them. Organizations face the choice of *maintaining* or *solving* these information imperfections in order to appropriate InfoRent or in order to prevent others from appropriating it. An information strategy aimed at *maintaining* information imperfections persists market opaqueness, whereas an information strategy aimed at *solving* information imperfections increases market transparency. The theoretical framework for information strategy thus results in 12 basic maintain/solve choices, depicted in Table 1. Summarized, these choices concern the three types of information imperfections both for the organization and suppliers in factor markets and for the organization and its customers in product markets. The choice for either maintaining or solving the existing and identified information imperfection depends on the amount of InfoRent that can be realized by either solving or maintaining it.

<i>Market</i>	Information imperfection for:	Information imperfection type	Existing	Solve/Maintain
<i>Factor markets</i>	Organization	Information asymmetry	Yes/No	Solve/Maintain
		Ambiguous information	Yes/No	Solve/Maintain
		Incomplete information	Yes/No	Solve/Maintain
	Suppliers	Information asymmetry	Yes/No	Solve/Maintain
		Ambiguous information	Yes/No	Solve/Maintain
		Incomplete information	Yes/No	Solve/Maintain
<i>Product markets</i>	Organization	Information asymmetry	Yes/No	Solve/Maintain
		Ambiguous information	Yes/No	Solve/Maintain
		Incomplete information	Yes/No	Solve/Maintain
	Consumers	Information asymmetry	Yes/No	Solve/Maintain
		Ambiguous information	Yes/No	Solve/Maintain
		Incomplete information	Yes/No	Solve/Maintain

Table 1 Overview of basic information strategy choices

3. Methodology

This section discusses the research methodology which guided the structured gathering and analysis of the research data. The underlying research paradigm and the design and execution of the method used are described.

3.1 Research approach

This research entails a qualitative, as opposed to a quantitative approach, since no generally accepted quantifiable measures of the constructs of interest exist. Furthermore, the main object of analysis, which is the information exchange process is typically a social phenomenon. In general, qualitative research approaches tempt to richly describe and explain social and cultural phenomena within their specific context. Quantifying the data results in the inability to understand a particular phenomenon from the viewpoint of the participants and its social context. Furthermore, this study is not meant to be nomothetic in the sense that it is aimed at generating general law like rules, but rather is idiographic in the sense that it takes into account the specifics and uniqueness of the case studied.

Any research is based on certain assumptions of what constitutes valid research. These philosophical foundations determine to a large extent what methods of inquiry and data analysis are used to come to valid results. The underlying epistemology that this study is based on is interpretivism. “Interpretive studies generally attempt to understand phenomena through the meanings that people assign to them” (Myers 1997, p.4). “It is assumed that our knowledge of reality is gained only through social constructions such as language, consciousness, shared meanings, documents, tools and other artifacts” (Klein and Meyers 1999, p.69). This study attempts to understand the phenomenon of information strategy by examining how different managers perceive and explain the decisions about whether to solve or maintain information imperfections in relevant strategic markets. The study hereby takes into account how the organization's context and its surrounding factor and product market, influences decisions regarding their information strategy.

3.2 Method

Within the qualitative interpretive research approach, several research methods are at ones disposal. These strategies of inquiry guide a researcher from philosophical assumptions through a research design to data collection and analysis. Besides action research and ethnographies, the case study method is one of the possible qualitative research methods. "A case study is an empirical study that investigates a contemporary phenomenon within its real-life context especially when the boundaries between phenomenon and context are not clearly evident" (Yin 1994, p.13). The case study method is

particularly suitable for addressing how and why research questions. The essence of a case study is that it attempts to illuminate a decision or set of decisions: why they were taken, how they were implemented and with what result. Since this research satisfies these condition, the case study method seems to be an appropriate strategy of inquiry.

3.3 Case study design

The study can be characterized as a holistic exploratory single case study, possibly part of a multiple case study. The main reason for conducting a single case study is twofold. Firstly, the study serves as a first empirical check of the constructs, propositions and hypotheses of the developed theory on information strategy. A single case allows for changing and refining the theoretical framework. Secondly, an important objective of the study is to verify that the real life organizations can relate to, understand and apply the reasoning as stated in the theoretical framework. Although the nature of this case study is holistic, in the sense that it has one basic unit of analysis, the study was conducted both at the concern and subsidiary level within TravelCom, to gain insight in the independence of strategic decisions of the subsidiary company and to gain access to expertise on the important concern-wide strategic decisions and policy guidelines.

The case study design consists of several components, among which are:

- ?? the study's question,
- ?? its propositions,
- ?? its unit of analysis,
- ?? and criteria for interpreting the findings (data collection and analysis)

3.3.1 Research question

As stated earlier, the main research question is:

How does TravelCom attempt to realize InfoRent by either maintaining or solving information imperfections in relevant strategic factor and product markets for travels?

This question determines the largely descriptive and partly explanatory character of the case study. The descriptive part consist of rich descriptions of TravelCom's context, its strategic objectives and guidelines, and its surrounding factor and product markets. Furthermore, the study describes which information imperfections TravelCom has identified as well as their decision whether and how to solve or maintain these imperfections. The explanatory part of the study consists of examining the reasons why TravelCom has made these choices in their information strategy, given their capabilities, resources, strategic directions and market context.

3.3.2 Propositions

There are several propositions that underlie this study. Firstly, it is assumed that every organization is surrounded by markets that have information imperfections. However, not every organization has identified these information imperfections and, after having them identified, actively reacts to these imperfections. The reason for selection this case within the travel industry is that this industry is highly information intense. The lacking of physical products has focused the attention towards information as one of the most important elements for travel organizations. Therefore it was assumed that a travel organization would be a case of organizations that have identified information imperfections and actively maintain or solve these imperfections. Also, it was assumed that due to the high volatility of the travel industry, travel organizations are actively aware of changing market conditions, such as new entrants or intermediaries, alliances and adapt their strategy to incorporate these changes. Furthermore, it was assumed that conducting a case study at one of the larger travel organizations, would prevent from analyzing only strategic intent. It was assumed that TravelCom disposed of sufficient financial and other resources to implement their desired business and information strategies. Also, the study aimed at a larger travel concern with several subsidiary companies in order to select the one that was focused the most on the strategic use of information.

3.3.3 Unit of analysis

The study's unit of analysis is the information processes within the TravelCom organization. This incorporates processes such as identifying relevant information, gathering, processing, analyzing and exchanging information either within or outside of the organization. This includes both information that is used *in* business processes, as well as information *about* business processes. The particular focus lies at those information processes that address the information imperfections that TravelCom identifies in their surrounding factor and product markets.

3.3.4 Data collection and analysis

With regard to data collection, interviews with both strategic business and information managers served as the primary data source. The interviews were complemented by information available on the company web site, annual reports and plans.

The interviews were preceded by sending a summary of the research and introductory meetings at both the concern and subsidiary company level. The first introductory meeting with the director of the strategy department at the TravelCom concern level was aimed at explaining the topic, design and main purposes of the research in general. In cooperation with the strategy director, the subsidiary company was selected which had a tradition in focusing at the strategic use of information. At the selected subsidiary company level again an introductory meeting was set up in order to explain the study.

The three semi-structured interviews were held with the director of strategy at the concern level, and both the director of IT and the financial director at the subsidiary company level. Both the introductory meetings and the interviews took place at the concern and subsidiary company head office location in the Netherlands, and lasted ranging from one to one and a half hours. The interviews were started by explaining the study's objectives and main question and describing the interview structure. The structure of the interview is depicted in Figure 2.

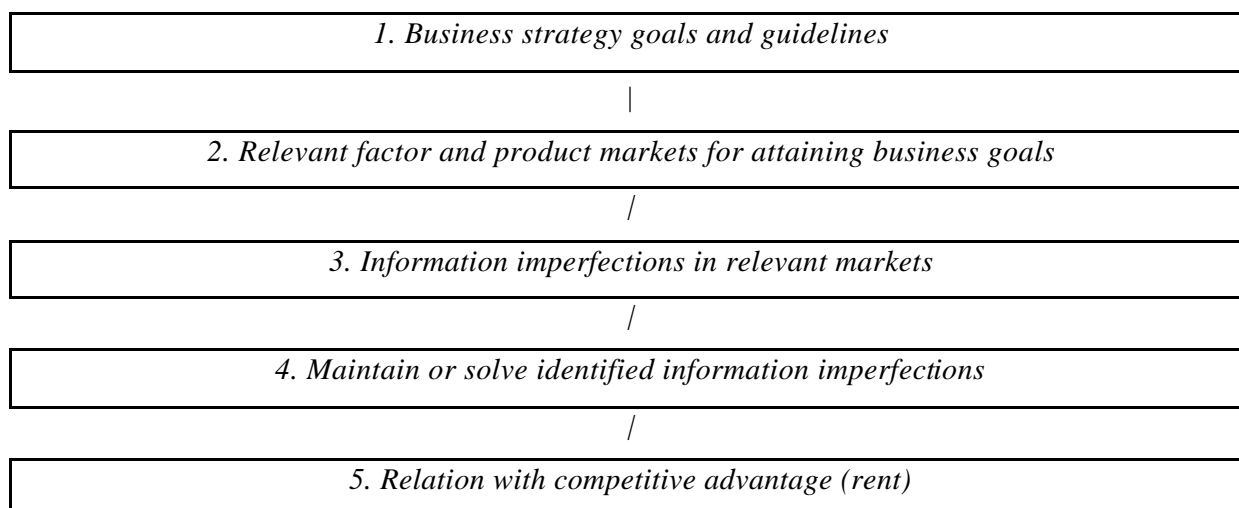


Figure 2 Interview structure

First, the interviewees were asked to identify the key issues in their business strategy, to describe their strategic objectives, policy guidelines and to explain the reasons for these choices. Second, they were asked to describe the factor and product markets that were relevant for implementing the business strategy. Then, they were asked to identify the information imperfections that existed in each of these relevant markets, to describe to what extent these imperfections were a realistic threat. For each of the information imperfections identified in the relevant strategic markets, the interviewees were asked to explain how they either maintained or solved these imperfections. In the last section, they were asked to explain how this might or might not contribute to sustainable competitive advantage or rent. All the interviews were recorded on tape. Subsequently, these tapes were transcribed and sent for correction to the interviewees.

The coding and analysis of the gathered data was assisted by a software tool for qualitative data analysis (CAQDAS – Computer Aided Qualitative Data Analysis Software), named Atlas.Ti. This software tool enables the researcher to code specific quotations in the transcription and to flexibly group these coded quotations. The code list that was used for labeling the data is listed in Table 2 below. Several codes were grouped to reflect the structure of the interview:

CODE GROUP	Strategy	Role as intermediary	Relevant supply markets	Relevant demand markets
Codes	<ul style="list-style-type: none"> - Concern strategy - Subsidiary company strategy - Competition 	<ul style="list-style-type: none"> - General added value - Added value as distributor - Added value as producer 	<ul style="list-style-type: none"> - Factor market supply - Factor market information - Factor market transparency 	<ul style="list-style-type: none"> - Product market demand - Product market information - Product market transparency

Table 2 Code groups

The coded quotations in each of the code groups were analyzed for major similarities and differences between concern and subsidiary company decisions and explanations. Within each group the basic reasoning, the reasons for certain decisions and explanations of relevant aspects were identified. By connecting the analyses of the basic reasoning within a code group with the other code groups, the original interview structure was recreated. This process of decomposing and recomposing, facilitated the analysis as presented in section 4 and 5.

4. TravelCom's case description

This section is intended to provide a general feel for the case studied, its business strategy and its role as intermediary between travel supply and travel demand markets.

4.1 Background and company profile

TravelCom came into existence after a merger of two large and established travel organizations in the mid 90s. It consists of over 3000 employees, with an annual turnover of over 3 billion Dutch guilders in '98/'99. TravelCom entails over a dozen different brands including tour operating, several travel agency chains, executive travel management, inbound tourism, and group and incentive travel management. Besides three large tour operating brands, TravelCom operates at several specialized product market combinations, placed under a number of smaller tour operators. Consecutively, each tour operator consists of several labels, focusing at a specific target group of customers. One of these tour operators is TravelSub. Figure 3 depicts the part of the TravelCom company structure, that is relevant for this case study.

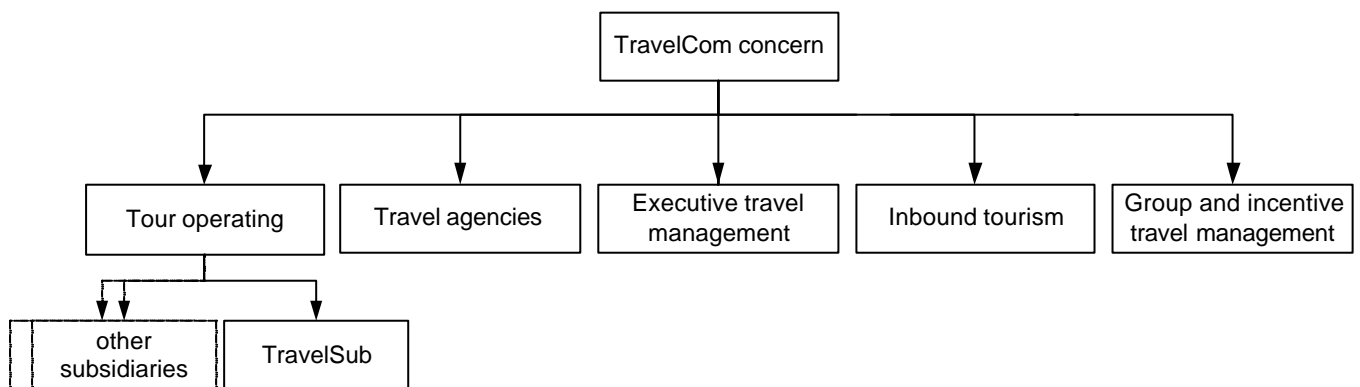


Figure 3 TravelCom's company structure

Within the Dutch travel industry, TravelCom is the only organization that is organized in several different subsidiary companies. As a result, the company consists of a separate commercial organization, which outlines the overall policy guidelines for the tour operating brands and labels that operate according to this policy.

At the concern level, TravelCom's mission, or business vision, is to manage the integral holiday experience of their customers. The customer's travel desire serves as their central basic principle in their choice to operate as a customer-oriented organization. TravelCom's motivation for this choice is that they consider each holiday as a unique travel experience. Therefore, the last thing TravelCom

wants is to straightjacket their customers in this experience. This drives their effort to know who their customers are and what their holiday needs and preferences are. Usually, travel organizations are focused solely at realizing economies in purchasing, basically neglecting the sales and customers side of the equation. TravelCom is currently undergoing a concern-wide shift in attention from purchase-oriented to a more customer-oriented approach to business.

One of TravelCom's subsidiary companies is TravelSub, one of its three substantial tour operating brands. TravelSub engages in both travel agency and tour operating activities.

In their tour operating activities, TravelSub has a long tradition in organized round trips with travel guides at cultural locations. Where it is common in the Dutch travel industry to sell products through travel agencies, TravelSub operates mainly as a direct seller. Thereby it relies heavily on its call center, their on-line booking facilities via their web site, direct mailings, and advertisement in newspapers and magazines.

4.2 Business strategy: guidelines and objectives

The business strategy at the concern level is a differentiation strategy, which becomes evident in a multi-brand strategy. Each brand consists of labels with a particular combination of value propositions, incorporating different ways to add value for customers. The combination of these value propositions for a particular brand or label is set out by TravelCom's separate commercial organization. Some of the labels have a price proposition, which adds value through reduced prices, whereas others have a service proposition. However, a price proposition does not necessarily imply that the particular label pursues a cost leadership position. In fact, none of the TravelCom labels have a cost leadership strategy. The difference in these price and service propositions is merely a way to distinguish between low-priced or more expensive labels. This differentiation strategy with an emphasis on added value through a service proposition, is in accordance with the proposition of the majority of international travel organizations.

TravelSub strategic objective is not to become as large as possible, but to generate the highest possible returns on invested assets. Within the travel industry, the average gross margins lie between 15% and 20%. TravelSub's gross margins do not differ substantially from these industry averages. However, their competitive edge shows in their net margins of around 7% compared to an industry average of around 1%. TravelSub states that this competitive edge is not a coincidence, but a direct consequence of their commercial strategy.

Both TravelCom and TravelSub have two basic functions as intermediary between travel demand and travel supply. On the one hand they produce holidays, in the sense that they purchase the separate

components, such as airline seats and hotel beds, and coordinate these components to make up an integral holiday. On the other hand, they distribute travels by publishing advertisements in several media. Their basic function as an intermediary is to produce those holidays that suit the needs of their aimed target groups.

4.3 Relevant factor markets for producing travels

As a producer of travels, TravelCom operates on the travel supply market. This supply market consists of a number of input or so-called factor markets. Basically, a travel product consists of three components: transportation to the holiday location, accommodation at the location and extras such as excursions, travel insurance and car rentals. Suppliers of transportation can be divided into coach tour operating and airliners, including both chartered and scheduled flights. Subsequently, suppliers of accommodations can be divided in hotel owners, hotel groups, and agents selling separate beds. The 'extra' travel components usually determine the marginal differences between holidays of competing travel organizations. Figure 4 shows this decomposition of travel components.

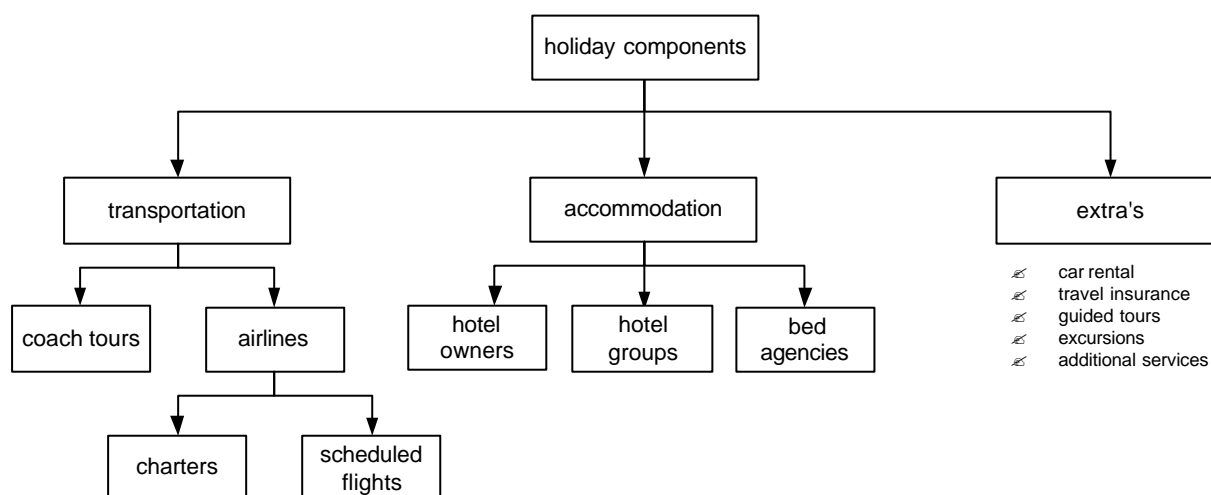


Figure 4 Overview of travel components

Compared with regular production, a travel product is produced in reverse order. Whereas in regular production, purchase precedes sales, travel products are produced in the opposite way. The transport and accommodation components are purchased, however only a paper stock exists, called allotments. Based on their expectations, TravelCom agrees on reserving a particular amount of airline seats or hotel beds. If they can not fill up these allotments, it is possible to return these allotments under certain circumstances. In that case TravelCom's risk is minimal, however they do need the entire allotment to ensure that they can actually deliver all travel products they sell to customers. On the other, if the demand exceeds the allotment, they have to demand extra allotments from their suppliers in time.

In purchasing these travel components, TravelCom adds value for customers in three ways, compared to them booking and coordinating their holidays themselves. They offer reduced prices, assurance against risks and a high quality of service.

4.3.1. Reduced prices as added value

The TravelCom concern can offer reduced prices for holidays as a result of two factors. First, they can realize economies of scale in purchasing transportation and accommodation allotments. There is a substantial difference in volume and margins between an individual consumer booking one hotel room for two weeks and TravelCom booking 50 rooms over a period of 30 weeks. Major purchasing discounts can be realized as a result of these economies of scale. In order to make use of these price reductions as a result of economies of scale, TravelCom attempts to realize synergy among their labels. Whenever TravelCom needs a particular amount of flights for a more expensive label, they identify a target group in a less expensive label that also suits this particular destination. By increasing the amount of flights purchased at one supplier, customers in less expensive labels can enjoy the more expensive holiday resorts as a result of economies of scale in purchasing. TravelCom hereby not only increases its margin in the more expensive labels, it also enables them to offer traditionally more expensive holidays to their customers in less expensive labels.

At the subsidiary level TravelSub has an additional source for reduced prices as a direct consequence of the nature of their core product, organized round trips. As opposed to for instance beach holidays, these round trips at cultural locations are not scheduled in high season, but usually somewhat off-season. Partly, this timing is a result of the nature of the product: round trips in high temperatures are regarded unpleasant. Partly, it is because the type of customers these holidays attract are usually elderly people in the higher income groups, who are either not bound to the regular holiday months or have a long holiday period. This also implies that TravelSub does not primarily compete on price, serving the tens of thousands customers that go the Spanish Costa's, but instead concentrate on several niches where margins are higher.

4.3.2. Assurance as added value

A second way in which TravelCom adds value to their products is by the assurance level they can offer their customers. TravelCom reduces risk for customers compared to them planning their holidays themselves by providing booking, legal and financial assurance.

TravelCom can provide booking assurance particularly in reserving accommodations and the coordination of travel components. For instance, an hotelier can allow himself to overbook a single customer once in a while, losing a couple of hundred guilders of income. However, overbooking TravelCom that is responsible for nearly half of its income, is less probable to happen. In case an overbooking does take place, consumers can count on TravelCom to arrange for another

accommodation that suits their holiday schedule. With respect to coordinating the holiday, TravelCom reduces the risk of consumers failing to coordinate their travel components themselves. They assure that the reservations for hotels, car rentals and tours and excursions fit the travel schedule. The assurance TravelCom can provide is a direct result of long-standing relationships with airlines and hotels.

TravelCom also provides legal and financial assurance for customers. In case of any unexpected problems with a hotel for instance, TravelCom handles the legal and financial aspects. This prevents the customer from taking legal action against hoteliers in foreign countries. The need for this legal and financial assurance seems to increase relative to the distance and reputation of the holiday location. For example, customers will arrange their weekend in Belgium themselves. However, when booking a holiday to Spain or Indonesia during the high season the perceived uncertainty increases dramatically, due to the differences in legal system or high chances of overbooking. The confidence TravelCom can provide to their customers, is an important aspect of assurance as an added value, especially at the more distant destinations.

4.3.3. Quality of service as added value

Regarding quality of service, TravelCom can offer high quality products as a result of local knowledge of the accommodations and guided tours and excursions. Through customer satisfaction surveys, local travel agents and hostesses, TravelCom is well informed about the pro's and con's of hotels, excursions and guided tours at a holiday location. This information makes it easier for TravelCom to judge which accommodations suit which type of customers. It enables TravelCom to offer particular customer groups a travel arrangement that suits their expectations about the quality of service.

At the subsidiary level, TravelSub is able to use its experience in organized round trips to offer a high quality product. As a result of their in-depth knowledge of local circumstances at holiday locations and existing relationships with local tour guides and excursion companies, they are able to offer round trips that are impossible to arrange for an individual vacationist.

4.4. Relevant product markets for distributing holidays

As a distributor of holidays, TravelCom operates on the product market for holidays that can be divided in several target groups. There are several ways to sell travel products to its aimed target groups. The most common distribution channel in the Dutch travel industry is selling through travel agencies. These travel agencies can be either independent or part of a chain owned by a particular travel company. In general, travel companies consider travel agencies as a separate retail organization.

Subsequently, a less common distribution channel is the direct market. Figure 5 depicts an overview of distribution channels in the travel industry.

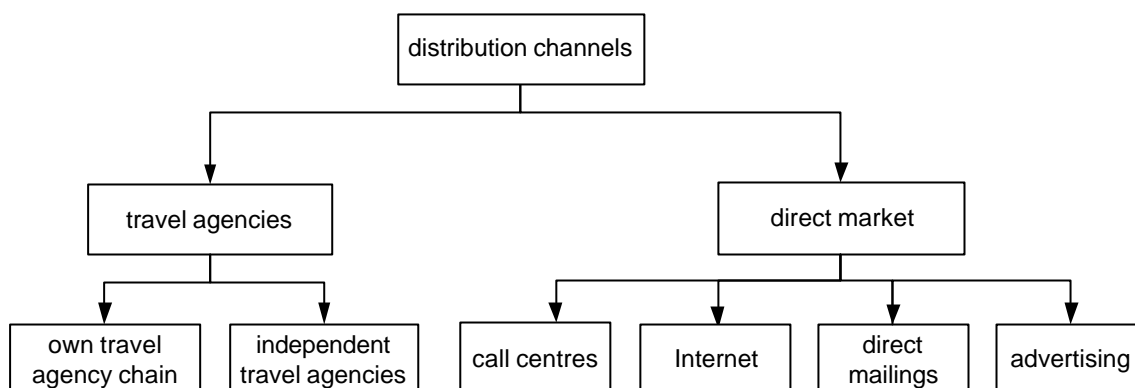


Figure 5 Overview of distribution channels

4.4.1 Multi-channeling

At subsidiary level, TravelSub does not consider travel agencies as a separate retail organization, but an extension of their tour operating activities, one of many possible distribution channels. TravelSub makes use of their privately owned travel agency chain and the direct market for distribution of their products. Their main distribution approach, however, is to operate as a direct seller by means of their call center, the Internet, direct mailings and extensive advertising in newspapers and magazines. This multi-channel strategy is a way of spreading their economic risk. The main reason for operating as a direct seller is the flexibility in reacting to changes in travel demand. Travel companies that communicate their products offering to their customer via brochures in travel agencies can change the content of their brochure at most once or twice every year. Due to these distribution channel restrictions, they can not quickly react to sudden changes in travel demand, such as an increase in demand of new holiday locations or a sudden decrease as a result of a war situation in a particular country. This flexibility in communicating their products offering enables TravelSub to have travel demand as a basic principle of doing business, as opposed the common purchase-oriented approach. However, this demand-oriented approach does not imply that TravelSub simply ignores special purchase offers from travel component suppliers. Whenever TravelSub identifies a special offer for a travel component, regardless of the demand for it by a target group, their knowledge of their target group preferences enables them to identify the target group with the largest chance of buying it. Regardless of the way the travel components are acquired, the basic principle is market demand, not supply. TravelSub combines their direct market approach with an active approach of communicating their product offerings to customers. They assume that their customers go on a holiday up to two or three times a year. Based on this assumption and the fact that the demand for holidays grows 7 to 8% a year, TravelSub takes the initiative to suggest a selected set of holidays to particular target groups. In the traditional brochure-oriented approach, customers have to take initiative in booking a holiday while travel companies passively await their reaction.

4.4.2 Multiple target groups

TravelSub not only spreads its economic risk by its multi-channel strategy, but also by aiming at multiple target groups. This takes shape in selling travel products under different labels to a specific target group, or market segment. TravelSub distinguishes for instance labels for young people, elderly people, a neutral label, and a label for people with above-average income and education. For internal use only, TravelSub has a so-called ad hoc label. This label is meant to sell travel products that are the result of unforeseen discounted purchase opportunities.

At the concern level, TravelCom categorizes customers in a particular market segment markets based on four aspects:

- ?? *Socio-demographics*: situational factors such as age, sex, social class, family composition.
- ?? *Holiday needs*: customers that have a need for quiet holidays or active holidays.
- ?? *Behavior*: customers that visit the same holiday location every year, customers that visit a different location each year, or customers that visit a distant destination once a year.
- ?? *Perception*: customers with a positive perception towards Mediterranean or Scandinavian countries, or a positive attitude towards coach travels or group holidays.

Every label is then focused at a target group with a specific combination of these aspects. For instance, the socio-demographic label that focuses at elderly people consist of customers that also have a positive perception towards arranged coach tours. Labels aimed at family holidays consist of customers with a positive perception towards bungalows and apartments, but not hotels. Regarding behavior, family holidays are also planned further ahead than for instance single traveler trips.

4.5 Summary of TravelCom's value adding activities

To sum up at the concern level, TravelCom adds value for customers not only in terms of quality of service, but also in terms of price reduction as a result of economies of scale in purchasing large allotments at the same supplier and synergy among different labels. Furthermore, they reduce risk for customers by providing booking, legal and financial assurance. As a distributor of holidays, the TravelCom concerns spreads its own risk by aiming at multiple target groups by means of different labels and using multiple distribution channels for sales.

The TravelSub subsidiary company is able to realize additional reductions in purchasing there travel components as a result of the off-season timing of their core product: organized round trips at cultural locations. TravelSub can also use its experience with round trips and local knowledge of the availability and quality of hotels, and excursions to offer customers a high quality of service.

5. TravelCom's information strategy

In order for TravelCom to realize InfoRent by means of their information strategy, both the relevant factor markets and product markets have to be characterized by information imperfections. For each of the information imperfections that TravelCom has identified in their relevant markets, they decide in their information strategy whether to maintain or solve these imperfections. This section examines to what extent TravelCom and TravelSub regard the demand and supply markets as transparent, by which information imperfections they are characterized and how the organization deals with these information imperfections in their information strategy. Within the factor markets (supply) and the product market (demand) for travels the transparency of the market for TravelCom and for the other market players is examined.

5.1 Factor markets transparency for TravelCom

The decision to purchase particular travel components depends on the popularity of the accommodation or destination in the recent years, the market position TravelCom wants to take and the advantageous purchase opportunities that occur. The most relevant information in this purchase decision is the price of the components. The prices of airline seats are of particular importance because it has a considerable impact on the overall price of the holiday and represent the most substantial part of the total travel expenses. With regard to the purchase decision of accommodation components, the most important information is the price quality ratio. With respect to the transparency of the factor markets for flights, hotels and extra travel components, TravelCom and TravelSub state that these input markets have very little secrets for them.

5.1.1 Factor market for transportation

With regard to the market for transportation, TravelCom has a complete overview of the suppliers of flights and their product offerings. In principle, anyone can retrieve which airline flies to which location, when new airlines enter or pull out. However, this insight is common knowledge amongst every tour operator. This differs very much from charter flights, because these charter flights are contracted by tour operators and disappear as sudden as they appear. This lack of certainty and clarity is exactly the reason why TravelCom operates mainly with scheduled flights. In terms of information imperfections that TravelCom faces, the factor market for scheduled flights is not characterized by the information imperfection of incomplete information. By choosing to operate mainly with scheduled flights, TravelCom avoids dealing the incomplete information imperfection that are intrinsic to the factor market for charter flights.

However, while the suppliers of scheduled flights and their product offerings are known, their routes and prices change continuously. TravelCom insight does not extend basic insight in the commercial tariffs that are published by the airlines, however this price differs substantially from the quoted price. This commercial tariff is the regular price an individual pays, while the quoted price is a negotiated price including economies of scale discounts. This quoted price is mainly dependent on the size of the allotment; the larger the allotment the bigger the economies of scale. Since a quoted price list for airline seats simply does not exist, TravelCom has no insight in these prices. In terms of information imperfections, TravelCom faces an information asymmetry with regard to the quoted prices. TravelCom has no insight in the quoted prices their competitors pay for flights, nor is there any incentive for their competitors or the airliners to reveal these prices.

5.1.2 Accommodation and extra's factor markets

The factor markets for accommodations and extra components are not completely transparent for TravelCom. In addition to price as important information for accommodations, TravelCom attempts to gain insight in the quality of service. The price/quality ratio of accommodations is hard to retrieve because the quality of service of an accommodation is very subjective and dependent on a combination of personal preferences. However, the main problem is that the quality of service can only be experienced at the location of the accommodation itself. However, TravelCom's commercial employees acquire a reasonable insight in the hotel offering per country and price quality ratios by means of several sources. TravelCom hereby not just relies on the star-ranking system for accommodations. This ranking system is ambiguous in the sense that a 4 star ranking does not represent the same service level all over the world. TravelCom combines experiences from previous seasons, customer satisfaction surveys, comparisons with other hotels, and information gathered from colleagues and at professional meetings, to gain insight in the price/quality ratio of the accommodation. Through their local agents and hostesses, TravelCom has a complete overview of existing and new accommodation suppliers. Analogous to the flight market transparency, TravelCom has good insight in the range of supplier and their product offering. However, insight in prices for these accommodations and extras is again restricted to the commercial tariffs, leaving quoted prices unrevealed.

In terms of the information imperfections in these factor markets, TravelCom faces both the imperfections of ambiguous information and information asymmetry, while incomplete information does not exist. The ambiguous information imperfection takes shape in the multiple interpretability of the quality of service of accommodations. To crown it all, the apparent helpfulness of the international ranking system seems to be ultimately misleading. The information asymmetry TravelCom faces, regards the lack of insight in quoted prices combined with no incentive for competitors,

accommodation or extras suppliers to reveal these. This information disadvantage also exists in the factor market for flights.

Table 3 provides an overview of the supply market 's information imperfections and summarizes its main causes.

<i>Information imperfection</i>	Information asymmetry	Ambiguous information	Incomplete information
<i>Existing</i>	Yes	Yes	No
<i>Main cause</i>	Lack of insight in quoted prices of flights and accommodations/extras	Subjectivity of information on the quality of service of accommodations/extras	Complete overview of suppliers and product offering

Table 3 Overview of information imperfections for TravelCom in the travel supply markets

5.1.3 Solving the factor markets' information imperfections

TravelCom's information strategy with regard to their travel supply markets is to attempt to increase market transparency by solving the information imperfections. The more transparent these input markets become for TravelCom, the stronger their negotiation position in buying travel components at suppliers and the better the fit between the actual quality of service in accommodations and customers' expectations.

With regard to the information asymmetry imperfection in determining the quoted prices at transportation and accommodation suppliers, TravelCom attempts to solve the imperfection through estimates. TravelCom can make a reasonable estimate of these quoted prices since the purchase price is almost entirely dependent on the allotment size. TravelCom compares their allotment size and associated quoted price with those of competitors. Although TravelCom does not know the exact allotment size of their competitors, they know from previous experiences what their average maximum allotment sizes are. Nevertheless, these estimates do not completely solve their information asymmetry and thus do not provide them with a stronger negotiation position in purchasing travel components. However, this disadvantageous information asymmetry does not influence TravelCom's purchase prices, because their sheer volume is the main reason for large economies of scale in buying allotments.

TravelCom also attempts to increase the transparency of the market for accommodations and extras by attempting to solve ambiguous information that they face in determining the quality of service of these components. TravelCom uses both subjective and objective information to gain insight in the quality of service. For the objective information TravelCom relies on Toeristiek. Toeristiek provides travel agencies with objective information about holiday resorts and accommodations. Touristiek has a team of researchers that visit holiday resorts on a regular basis to check whether the published information

in brochures matches the actual situation. This includes for instance walking distances to the beach, hotel room size, and available guest facilities. For the subjective information about the quality of service, TravelCom relies mainly on its customer satisfaction surveys, and their local hostesses and travel agents. This provides them with the quality of service information linked to the information they have on the particular customer. This enables them to gain insight in which service level suits which type of customer.

TravelCom does not face the incomplete information imperfection, since a complete overview of travel component suppliers is common knowledge amongst tour operators. Therefore, TravelCom's information strategy does not address this type of information imperfection.

Table 4 summarizes TravelCom's information strategy in the relevant travel supply markets.

<i>Information imperfection</i>	Information asymmetry	Ambiguous information	Incomplete information
<i>Existing</i>	Yes	Yes	No
<i>Main cause</i>	Lack of insight in quoted prices of flights and accommodations/extras	Subjectivity of information on the quality of service of accommodations/extras	Complete overview of suppliers and product offering
<i>Solve/maintain</i>	Solve	Solve	---
<i>By means of</i>	Estimating competitors' allotment sizes and prices	Gathering objective and subjective quality of service level information	---

Table 4 Information strategy choices for the information imperfections for TravelCom in the travel supply markets

5.2 Factor market transparency for travel component suppliers

Increasing TravelCom's insight in the factor market for travel components is but one side of the equation. This section examines the transparency of the demand for travel components as seen from the standpoint of the travel component supplier. Since no data were collected on the information imperfections that TravelCom's suppliers identified, only the information imperfections that can be influenced by TravelCom's information strategy are discussed.

For the travel component suppliers it is important to have as much insight as possible in TravelCom's demand for these components. However, these suppliers are generally not familiar with acquiring information about customer demand. Since TravelCom, does have information about customer demand at its disposal, TravelCom has an information advantage.

It can be the case that an airline supplier can not fill their flights to a particular destination, either because of an unpopular destination or the high prices of the flight. As a consequence of TravelCom's information advantage, they can obtain a position of power in price negotiations because they have insight in the demand for this particular destination.

As a result, TravelCom not only strengthens its reputation as a travel organization that fills their allotments. Also, they are able to offer a reduced price for travels to the more expensive destinations because of the power position in the price negotiations. The information advantage not only aids TravelCom's reputation, it also increases their ability to offer low prices as added value for their customers.

5.2.1 Maintaining the information asymmetry

In terms of information imperfections, this implies that an information asymmetry between TravelCom and the travel component suppliers can exist. Since TravelCom disposes of information about the demand for a particular travel component whereas the supplier sometimes lacks this demand information, TravelCom enjoys an information advantage. Since this information advantage is the possible source of a position of power and leads to lower prices for buying travel components, TravelCom attempts to maintain this information asymmetry.

Table 5 summarizes the choices in TravelCom's information strategy for the information imperfections that the travel suppliers face.

<i>Information imperfection</i>	Information asymmetry	Ambiguous information	Incomplete information
<i>Existing</i>	Yes	No	No
<i>Main cause</i>	Lack of insight in demand for certain travel components	---	---
<i>Solve/maintain</i>	Maintain	---	---
<i>By means of</i>	Not sharing the demand information, and using the information to obtain a position of power in price negotiations	---	---

Table 5 Information strategy choices for the information imperfections for travel component suppliers

5.3 Product market transparency for consumers

In analyzing the transparency of TravelCom's product or output markets, two perspectives are relevant: consumers and organization. First, the travel demand markets are analyzed from the consumer perspective in order to examine to what extent the differences in product offerings in the travel markets are insightful for consumers.

From this consumer perspective, the product markets for transportation, flights in particular, are becoming increasingly transparent. This implies that consumers have gained more insight in the different flight suppliers, their product offerings and their commercial tariffs. Both travel comparison

web sites and on-line access to professional booking systems have contributed to this increased transparency. Comparison web sites, such as seatonly.nl and lastminute.com, provide an easy way to get an overview of airlines that fly to a particular destination and to compare their tariffs. On the other hand, virtual travel agencies provide consumers with online access to professional booking systems, such as WorldSpan or Galileo. In some cases these virtual travel agencies are associated with airports, like TravelPort at the Schiphol web site, others are independent, like Expedia.nl. These virtual travel agencies not only compare the prices of flights, but also of hotels and car rentals.

With regard to the product markets for accommodations, both Toeristiek and company web sites have increased the transparency for consumers in the accommodation markets. As explained before (§ 0), Toeristiek independently provides both objective and subjective information about accommodations. For now, consumers can access this information through their travel agencies, however in the future Toeristiek is planning to offer this information via their web site. Also, increasingly hotels and car rental companies are providing information about their product offering, their facilities and prices on their company web sites.

TravelCom states that in theory, the more transparent travel markets get for consumers, the lower the prices for travel products and the smaller TravelCom's margins. Furthermore, TravelCom faces the theoretical risk of being disintermediated by accommodation suppliers that communicate their product offerings directly to consumers via their web site. For instance, agents that normally sell country arrangement to tour operators can decide to offer their products directly to customers by using a web site. Even though, several travel markets have increased in transparency for consumers, TravelCom does not regard this as a realistic threat for their role as intermediary between travel supply and demand, or their margins.

Firstly, the threat of disintermediated is not realistic, because several factors cause small financial hurdles that inhibit suppliers to compete with TravelCom on price in a market where net margins are already wafer-thin. The main problems these suppliers face is to generate group size without an established brand name or reputation, and to handle financial transactions. Without a sufficient group size, the lack of economies of scale will drive up the costs enormously. A possible solution to create group size would be to aim at a large target group. However, even if the suppliers decide to concentrate on Europe only, they face a language problem. TravelCom focuses solely on Dutch customers, to whom they can offer a Dutch speaking travel guide.

Second, the threat of travel comparison web sites is not substantially high for TravelCom. These web sites offer a free comparison of travel prices, based on some characteristics such as travel period, number of people, destination and preferred means of transportation. The main problem is that the

majority of these sites offer a price comparison only, without comparing the quality of the different options. Therefore, these sites help consumers to identify the range of possible tour operators that offer a travel that suits some requirements, however they do not support consumers in deciding which option suits their preferences. Most of the sites also just offer a comparison of just one of the travel components, while tour operators typically offer combinations of different travel components in packages. While these comparison web sites seem to increase at least a part of the opacity, their abundant presence on the Internet in itself causes the market transparency to decrease.

Finally, objective information providers and accommodation suppliers presenting their product offering directly via the Internet are not considered a threat to TravelCom. Although they provide consumers with some insight in the available product offerings, however they can hardly provide insight in the quality of service, as for instance the quality of meals, service personnel and facilities. This type of quality is hard, if not impossible, to judge from just figures and pictures. Even if consumers would be informed about these differences in quality of service, the problem of translating quality difference in a price difference still remains.

To summarize, the travel market transparency for consumers can be characterized in terms of the identified information imperfections. The mere number of tour operators and the diversity of travel products offered are the main causes for consumers facing the incomplete information imperfection in comparing travels from different tour operators. However, due to on-line access to professional booking systems, comparison web sites and travel component suppliers' product offering, this imperfection is decreasing. However, these information sources do not support consumers in comparing the quality of particular travel products. In determining the quality, consumers face both the ambiguous information imperfections and an information asymmetry. Ambiguous information is caused by the impossibility of providing objective information about the quality of a travel product. This kind of information is open to multiple interpretations, leading to different perceptions of the quality based on the same information. The related information asymmetry consists of the information disadvantage that consumers have concerning the quality of a travel product. Consumers can only acquire their perception of the quality by experiencing the travel, while TravelCom receives information through customer satisfaction surveys, local agents and hostesses.

Table 6 summarizes the information imperfections that consumers face on the product market for travels as well as their main causes.

<i>Information imperfection</i>	Information asymmetry	Ambiguous information	Incomplete information
<i>Existing</i>	Yes	Yes	Yes, though decreasing
<i>Main cause</i>	Lack of insight in the differences in quality of travel products beforehand	Subjectivity of information on the quality of travel products	Overview of suppliers through online access to booking systems and comparison web sites

Table 6 Overview of information imperfections for consumers on travel product markets

5.3.1. Maintaining the product market’s information imperfections

Although TravelCom does not consider the increasing transparency of travel product markets for consumers as a realistic threat, their main aim is to keep these markets as opaque as possible. TravelCom realizes the negative effect of transparent travel product markets on their prices and margins. Therefore their information strategy is aimed primarily at maintaining the information imperfections that consumers face. The way TravelCom attempts to maintain the information imperfections is by inhibiting direct price comparisons of their travel products with those of direct competitors. TravelCom prevents this direct comparison by packaging several travel components to make up an integral travel product that differs from competitors' packages. In comparing, for instance, a TravelCom product with a competitor, it can well be that there is a one guilder charge for three days of car rental. Even if this results in an overall higher price for the entire travel package, it is an important way to differentiate TravelCom's packages from those of competitors. The car rental extra increases the quality of service for customers that are willing to pay for it. By maintaining both the information asymmetry and the ambiguous information consumers face in comparing travel products of different travel organizations, TravelCom relies on its brand name and reputation for offering high quality travel products.

With regard to the decreasing of incomplete information, TravelCom is meticulously aware of the Internet initiatives, such as travel comparison web sites and travel portals. Their decision whether or not to participate on these sites depends mainly on whether it enables them to reach their aimed target groups and realize their strategic objectives of net margin maximization. Their strategy towards these sites and portals is to selectively take part on them.

Table 7 summarizes TravelCom's information strategy for the information imperfections consumers face in travel product markets.

<i>Information imperfection</i>	Information asymmetry	Ambiguous information	Incomplete information
<i>Existing</i>	Yes	Yes	Yes, though decreasing
<i>Main cause</i>	Lack of insight in the differences in quality of travel products	Subjectivity of information on the quality of travel products	Overview of suppliers through online access to booking systems and comparison web sites
<i>Solve/maintain</i>	Maintain	Maintain	Maintain
<i>By means of</i>	Inhibiting direct comparison of travel products with those of competitors	Relying on their brand name and reputation for offering quality travel products	Participating on a selected number of comparison web sites

Table 7 Information strategy choices the information imperfections for consumers on travel product markets

5.4 Product market transparency for TravelCom

The second perspective that needs to be examined is the transparency of consumer demand for travels, for TravelCom. In order to fine-tune the purchase of travel components, it is important for TravelCom to gain as much insight in future demand for travels as possible. With regard to this insight, TravelCom states that for them the demand for their products is fairly transparent. When comparing TravelSub's insight in customer behavior with competitors, TravelSub states that they are ahead of most of their competitors.

The reason for this comparative advantage in using customer information is twofold. Firstly, customer information is a major point of interest in their business strategy. This shows in a concern-wide marketing department that is larger than the usual single employee marketing department. Also, TravelCom invests in and uses data warehouses en other Customer Relationship Management (CRM) technologies that enable the gathering and analysis of large quantities of customer information.

Secondly, TravelSubs has a long tradition in gathering and analyzing customer information. In the 80's, TravelSub started systematically building customer profiles based on the customer's transaction history. Although customer information of over five years old is useless, TravelSub has gained experience during this time. This experience concerns technologies and techniques that enable the gathering and analysis of customer information, and the skill of translating these customer profiles into the right travel products. Furthermore, TravelSub has a major advantage in acquiring customer information as a direct seller compared to travel companies that sell via travel agencies. Because of the absence of intermediaries, TravelSub is in full control of which customer information is gathered and in what way. This experience and systematically gathered customer profiles are not common within the Dutch travel industry. Therefore, competitors can only scantily dispose of customer information and customer profiles based on their transaction history. Currently, the use of customer information is a major spear point in the majority of TravelSub's competitor strategies. Competitors currently invest

in technologies and techniques to acquire customer information, however they lag in experience in translating this information into travel products.

5.4.1 Solving the product market's information imperfections

Although TravelSub has a comparative advantage with regard to the use of customer information, this does not mean that customer demand for travels is fully transparent. In terms of information imperfections, TravelSub faces both information asymmetry, incomplete and ambiguous information.

No matter how extensive a customer profile is, the predictability of when a customer books which travel closely resembles reading tea-leaves. This difficulty is the main cause for the ambiguous information that TravelSub faces. The interpretation of the information in a customer profile is not trivial. The use of this information for predicting future demand, not necessarily reflects the customer's actual buying decisions. These decisions are explainable *ex post* if you are able to gather enough factual customer data, however prediction of customer demand remains TravelSub's ambition, for now. Obviously, the customer is much better informed about their decision to buy a certain travel product than TravelSub. The information asymmetry that exists, is therefore an information disadvantage for TravelSub compared to their customers.

TravelSub also faces the problem of incomplete information when it concerns customer demand. Although TravelSub actively gathers customer information, they cannot gather any information about the future demand of non-customers. The incomplete information about customer demand exists because of the impossibility of creating customer profiles of consumers that have never contacted TravelSub. In the future, one of TravelSub's desires is to enrich their customer profiles with information about travels that have been offered to customers, but have not been booked. This would imply an even more important role for TravelSub's travel agencies and its call center and website as assembly points for customer information.

To summarize, TravelSub faces all three information imperfections in gaining insight in their demand market. Their way of handling these imperfections is aiming to solve them to the extent that is possible. TravelSub already has a tradition and experience in interpreting customer information and wants to extend this. However, the simple gathering of more factual information about a customer transaction history, does not take away the difficulty of translating this information in a future demand for a specific travel product.

Table 8 summarizes TravelSub's information strategy for the information imperfections they face in gaining insight in the customer demand for travels on the travel product markets.

<i>Information imperfection</i>	Information asymmetry	Ambiguous information	Incomplete information
<i>Existing</i>	Yes	Yes	Yes
<i>Main cause</i>	Lack of full insight in the decision on buying a travel product	Range of interpretations of gathered customer information	Impossibility to gather information of non-customers
<i>Solve/maintain</i>	Solve	Solve	---
<i>By means of</i>	Improving the experience and skills of interpreting and translating customer profiles into travel products	Improve and extend the gathering and analysis of customer information	No solution at present

Table 8 Information strategy choices for the information imperfections for TravelSub on travel product markets

5.5 Overview

Table 9 provides an overview of TravelCom's information strategy in both its factor and product markets.

<i>Market</i>	Information imperfection for:	Information imperfection type	Existing	Solve/Maintain
<i>Factor markets</i>	TravelCom	Information asymmetry	Yes	Solve
		Ambiguous information	Yes	Solve
		Incomplete information	No	---
	Travel component suppliers	Information asymmetry	Yes	Maintain
		Ambiguous information	No	---
		Incomplete information	No	---
<i>Product markets</i>	TravelCom	Information asymmetry	Yes	Solve
		Ambiguous information	Yes	Solve
		Incomplete information	Yes	---
	Consumers	Information asymmetry	Yes	Maintain
		Ambiguous information	Yes	Maintain
		Incomplete information	Yes, though decreasing	Maintain

Table 9 Overview of TravelCom's information strategy

5.5.1 Information capabilities and resources

With regard to the required information capabilities in TravelCom's factor markets, the information strategy focuses at:

- ?? Estimating competitors' allotment sizes and prices

- ?? Gathering both factual and subjective information about the quality of service of travel components
- ?? Not sharing travel demand information, and using the information to obtain a position of power in price negotiations with travel component suppliers.

The important information resources that lie at the core of the information imperfections identified in TravelCom's factor markets, are:

- ?? Travel component's quoted price information
- ?? Information about travel component's quality of service
- ?? Information about customer demand

With regard to the required information capabilities in TravelCom's product markets, the information strategy focuses at:

- ?? Inhibiting direct comparison of travel products with those of competitors.
- ?? Relying on their brand name and reputation for offering quality travel products
- ?? Participating on a selected number of travel comparison web sites
- ?? Improving the experience and skills of interpreting and translating customer profiles into travel products
- ?? Improve and extend the gathering and analysis of customer information.

The important information resources that lie at the core of the information imperfections identified in TravelCom's product market, are:

- ?? Information about the composition of travel products
- ?? Transaction profiles of customers
- ?? Information about customer demand

6. Conclusion

This section will summarize the most important results of the case study at TravelCom. Furthermore, the theoretical and practical contribution of the study will be examined. Finally, suggestions for further research will be given.

6.1 Important results

The most important results with regard to TravelCom's information strategy are that:

- ?? Travel comparison web sites and on-line access to professional booking systems via the internet is currently no realistic threat. These on-line information facilities partly solve the imperfection of incomplete information and hence increase the product market transparency for consumers. Since, these facilities do not involve comparisons of the quality of travel components, there is no direct implication for TravelCom's prices and margins.
- ?? TravelCom maintains the information advantage over suppliers when it concerns customer demand information. The information advantage serves as means of power in price negotiations with travel component suppliers, and thereby strengthens its reputation and contributes to offering high quality of service for reduced prices.
- ?? TravelCom deliberately prevents customers from comparing their travel products with those of competitors by differentiating the combination of travel components that make up a travel product. In order to avoid direct price comparison, TravelSub chooses to sometimes add extra service components in order to appeal to their aimed target groups.
- ?? TravelCom's role of adding value for customers by providing coordination, legal and financial assurance, is based on information ambiguity and the information disadvantage customers face in judging the quality of travel components. TravelCom's knowledge of travel component suppliers and their product offerings through experience, local hostesses and agents and customer satisfaction surveys, enables them to maintain these information imperfections for customers while charging them to dispel the possible negative consequences of not having this knowledge.
- ?? TravelCom attempts to solve their information disadvantage in knowing their customer's travel preferences. This information enables them to align their product offerings with the preferences of aimed target groups, thereby increasing the overall margins.
- ?? Currently, there is no threat of self-organizing customer groups attempting to realize economies of scale. Customer groups that attempt to disintermediate travel organizations face several financial hurdles that decrease the margins that are already wafer-thin.

6.2 Theoretical and practical contribution

The theoretical contribution of this case study lies in the empirical grounding of the newly developed concepts of information strategy and InfoRent. No founded theory was available to examine and analyze the strategic contribution of information to strategy. The concepts developed in this research are well founded in existing economic theory and based on contemporary theories about market functioning. The resource-based view seems to provide an appropriate base for examining how organizations attempt to realize economic returns based on market imperfections. By adding an informational perspective to the resource-based view, drawing on Barney (1986) and Itami (1987), the role of information and information imperfections in strategy can be made explicit.

The practical contribution lies in providing organizations a theoretical framework with which they can analyze the markets that are relevant for their business. On the one hand, the framework forces organizations to examine the information imperfections they face themselves and the opportunities that arise from them. On the other hand it forces organizations to examine the information imperfections that their suppliers and customers face and what role the organization can play in maintaining or solving these. In this way, the theoretical framework provides a way to identify the necessary information resources and capabilities, that are required to implement the choices in their information strategy.

One of the interviewees stated that they issues that were discussed in the interview, were certainly topics in their strategy meetings. However, in these meetings the topics are not addressed as structurally, thoroughly and in as much detail as in the interview. Also, although he admitted that the topics addressed could be labeled as information strategy topics, they had never used this term when discussing the issues. For the organization, these issues were typically business issues, and naturally involved information aspects.

6.3 Known limitations

The limitations that can be identified for this exploratory case study are firstly the limited generalisability of the study. In order for the theoretical framework to be generalisable, more cases should be examined in detail. The choice for the travel industry as a information-intensive industry might contribute to the applicability of the theoretical framework in analyzing information strategy. It could well be that in less information intense industries, the usefulness of the framework is lower and the results of the analysis are trivial.

Due to time limitation in the interviews, the questions on the relationship with information strategy choices and the actual realizing of sustainable rent were not always answered. This relationship remains a topic for further research. However, in order to examine this relationship a profound insight in the ways organizations attempt to realize InfoRent is required.

6.4 Plans for further research

In the near future, a second and third case study in the Dutch travel industry will be conducted. Plans are to As an extension of this single case study, more studies will be conducted within the Dutch travel industry. Plans are to include both a travel component supplier, and a travel comparison website in the research. In this way, insight can be given in the strategic dynamics of the Dutch travel industry.

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Information Strategy at TravelCom

- searching for InfoRent in the Dutch travel industry -

Onno Truijens

Universiteit van Amsterdam

Department of Accountancy and Information Management

Abstract: This paper reports on a case study at a Dutch travel organization, named TravelCom. The study examines how TravelCom makes strategic use of information by means of their information strategy. In their information strategy, TravelCom decides how to realize InfoRent, i.e. economic rent as a result of solving or maintaining information imperfections in factor and product markets. TravelCom aims at increasing the transparency of factor markets for themselves, thereby maintaining any information imperfections that are disadvantageous for travel component suppliers. Whereas in their product markets, they maintain the existing market opaqueness, preventing consumers from easily comparing their products with those of competitors. At the same time, TravelCom attempts to increase the insight in customer demand by building customer profiles.

Keywords: *information strategy, InfoRent, information imperfections, resource-based view, travel industry*

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Roetersstraat 11, Room E 2.74
1018 WB Amsterdam, Netherlands
Email: admin@sprouts.aisnet.org