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**Exploring organizational antecedents for sustainable product development for
international tour operating businesses**

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Exploring organizational antecedents for sustainable product development for international tour operating businesses

The development of sustainable products or services is defined by Maxwell as the process of making products or services in a more sustainable way (production) throughout their entire life cycle, from conception to the end-of-life (Maxwell & van der Vorst, 2003). Essentially, *sustainable products or services* are alternatives to existing ones, but of a superior quality, providing the same function to the customer, being more cost-effective, while also generating less harm on the surrounding environments or societies. The emphasis is on securing the efficiency of inputs and outputs is all actions along the life cycle of the product or service, from raw materials to discharged waste, so that unnecessary consumption of resources and generation of wastes are avoided. More advanced concepts such as *product-service systems* and *needs-oriented-service systems* aim to reduce impacts from the production and the use phase, or even at the end-of-life phase of a product (Mont, 2002; Roy, 2000). New and under development, the area of product-service systems is increasingly gaining acceptance from companies (Manzini & Jégou, 2003).

In the area of services, a successful concept are the *eco-efficient services*, defined as “systems of products and services, which are developed to cause a minimum environmental impact with a maximum added value” (Brezet, Bijma, Ehrenfeld, & Silvester, 2001; Herring & Roy, 2002). Taking the reduction of environmental impacts as one of their main goal, the provision of eco-services is focusing on improving the performance of the supportive products and delivery processes so that the service outcome is achieved with less impact. Examples of applying the eco-service concept in practice show environmental gains up to 50% (e.g. energy consumption) in sectors such as transportation (van der Berg & Vringer, 1999), as well as, a great potential to address in the future the social, economic and ethical aspects raised during their provision.

In tourism, references to environmental or sustainable improvements in product development are rare. One of the reasons may be the lack of innovativeness of tourism as a sector, as pointed out by specialists (OECD, 2003). Apart from a few seminal contributions such as Hjalager (1997; 1998; 2002), Nordin (2003), Decelle (2004) and Weiermair (2004), the field of product or process innovation in tourism is still in incipient stages (Sundbo, Orfila-Sintes, & Sorensen, 2007) with

immature frameworks and definitions (Decelle, 2004). In practice, most creative energy is spent on seeking new locations or marketing strategies rather than developing entirely new products (Mattsson, Sundbo, & Fussing-Jensen, 2005) while major investments go into the development of information and communication technologies (Decelle, 2004). A possible direction for reinventing tourism is sustainable innovation or improvement of tourism products or processes. The concept has already been tested in small-scale operations that show how tourism can be built without harming natural and cultural values, while bringing benefits to local economies and communities (Hardy, Beeton, & Pearson, 2002; Holden & Kealy, 1996; Weaver, 2001). However, improvements with the scope of introducing sustainability into holiday development are less discussed in the context of large tourism operations.

International tour operators conduct a large variety of activities which consumes most of their organizational resources and may be a strong barrier for the adoption of sustainable practices. Examples of best practice in sustainable tourism emphasize that having small-size operations is a key success factor for a sustainable tourism development (Komppula, 2006; Molstad, 2002; Poon, 1990; Swarbrooke, 2000; Wanhill, 2000), implicitly excluding the possibility that large tour operators may adopt it. While examples of small-scale sustainable improvements in holiday development thrive, the lack of empirical evidence from mass tourism suggests that charity actions, the adoption of codes of conduct and good housekeeping measures are the most appropriate improvements for large-scale operations (Forsyth, 1996; Kalisch, 2002; Lück, 2002), enlarging its conceptual dissociation from sustainable tourism. The rare adoption of sustainable product development procedures by large companies indicates the possible existence of deeper organizational barriers, which gave scope to this research. In the absence of well-established cases of SPD in large operators, this investigation examined the factors that influence holiday product development, exploring possible hindrances to the introduction of sustainable improvements.

The development of holiday products

Holidays and their production can be described from a customer perspective, with an emphasis on *the service concept* and the holiday experience (Bitner, 1992; Jones et al., 1997; Otto & Ritchie, 1996; Stamboulis & Skayannis, 2003), or from a service management perspective, where the focus is on the practical aspects of organizing the *holiday system and delivery* (Holloway, 1998; Laws, 1997). In fact, the two perspectives are facets of the same process that involves both the provision of services and their consumption. Evaluations looking only at one side would remain largely incomplete. The view is in line with more holistic perspectives such as Smith's (2004) who defines tourism products as *complex human experiences* that result from five converging elements: the physical environment (natural and/or man-made), the service, hospitality (attitude or style of delivering services), customers' freedom of choice, and their involvement (by paying attention or physically engaging in tourism activities). An added value of Smith's (2004) perspective is the emphasis on tourists as co-producers of experiences and the importance of the quality of the relationship between providers and tourists (hospitality) in determining tourist satisfaction with holidays. In the context of this research *tourism products* are considered as *combinations of multiple tourism services (subject of trade), provided in an organized manner with the function of providing a leisure experiences to customers*, having a *service dimension* represented by physical services, facilities and surroundings, associated to the *experiential dimension*, related to the customer process of enjoying leisure.

The dual nature of tourism products has a direct implication on the study of their development, which encompasses the study of two managerial processes, service development and customer management. Closely intertwined, these two processes cannot be understood separately and are best understood by the following three major successive steps (Edvardsson, 1997): setting the *holiday concept* and the associated holiday program, preparing the *holiday system* (by allocating resources and responsibilities for delivering the service v- it does not involve the actual provision of services), and running the *holiday delivery* process (using components of the holiday system to satisfy customers' demands). In fact the process of holiday development is more complex and may include up to 15 steps (Jones et al, 1997). Sustainable improvements of holiday development should refer to the design and setting of the service system, as well as to the organization of customer service in a way that induces a possible reduction of impacts from tourist (individual) consumption.

Product development for sustainable tourism

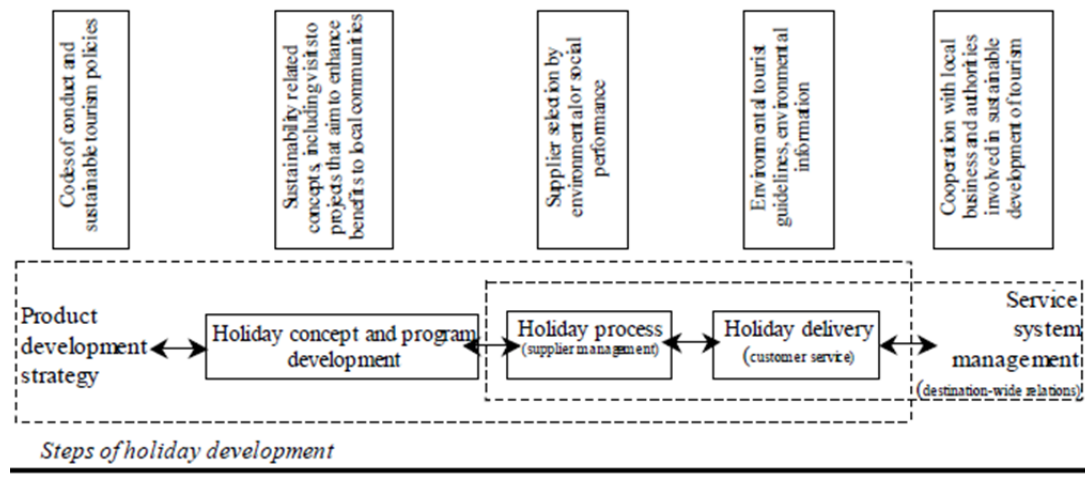
A new territory for large tourism companies, products development is a strategy put forward for its potential to bring progress towards sustainable tourism (TOI, 2003). Examples of small-scale practices in sustainable or responsible tourism can be considered analogous with improvements of different elements in a holiday package or steps in their production, but none applies to the entire process described as holiday development (Laws, 1997).

Table 1: Environmental improvements in the development of holiday products

Best practices in <i>sustainable tourism</i>	Steps in <i>environmental product development</i>	Steps in <i>holiday development</i>
Responsible codes of conduct and sustainable tourism policies	Environmentally oriented policy formulation	Product development strategy
Concepts related to sustainable tourism (e.g. eco-tourism, pro-poor tourism, community tourism); Holiday attractions include visits to natural parks, conservation areas, community projects	Idea formulation for environmental products	Holiday concept and program development
Supplier selection by environmental or social performance (eco-lodges, eco-labeled hotels, environmentally awarded destinations)	Developing eco-design alternatives	Holiday process
Environmental tourist guidelines, environmental information	Product realization	Holiday delivery
Cooperation with local initiatives for enhancing business performances and community involvement in sustainable development of tourism		Managing the service system

Based on current examples and literature studies, Table 1 presents a few suggestions for how sustainability could be integrated in the development of holidays. Examples of champion tour operators suggest that product development for sustainable tourism or *sustainable product development* (SPD) involves introducing sustainable tourism principles into the design of packages, supplier selection and in the delivery of holiday services to customers (TOI, 2003). Translated to the operational processes of product development by tour operators, a sustainable product development may follow the steps outlined in Figure 1.

Figure 1: Environmental improvements along the process of holiday development and delivery (adapted from Edvardsson, 1997)



Only a few large tour operators have formal sustainable or environmental product development procedures in place. A reason may be the unfamiliarity of tour operator managers with the concept of sustainable or environmental product development or the misconception that “it is not for us, is for smaller companies” (Budeanu, 1999). Starting from the assumption that organizational barriers may be the reason for this reserved attitude, this investigation examined the factors that influence holiday product development, exploring possible hindrances to the introduction of sustainable improvements. In order to illustrate this point, this paper uses results from a previous exploration into holiday development in Sweden in 2004 to which theoretical reflections were added later.

Study method

This study followed the process of holiday development in the tour operating business and looked at the organizational antecedents for sustainable product development, following Jones’ findings (1997) from investigating UK tour operators and knowledge on environmental product development from manufacturing sectors (Table 2).

Table 2: Organizational antecedents for sustainable product development in tourism

External conditions	Organizational antecedents	Product / process characteristics	Customer relations characteristics	Skills & knowledge
Market maturity	Product oriented environmental policy	Flexibility of production process	Synergies with environmental strategies	Available skills
	Organizational culture	Supplier involvement	Risk management	Tacit knowledge
	Market intelligence (R&D)	Type of product		
	Functional interface	Involving stakeholders		

The antecedents presented in Table 2 were identified by following the development of two holiday packages, a conventional package (*Destination Phuket*) and a specialized package (*Thailand Runt*). The comparison between the two products gives the opportunity for identifying the differences with significant bearing on sustainability improvements. In order to minimize the complexity of the analysis, the study examines two products of the same company and located in the same destination (Thailand). In the absence of formalised procedures for sustainable product development by tour operators, this study uses corporate expertise to evaluate *ex ante*, opportunities, barriers and probable gains from adopting SPD. The qualitative findings of the study are indications of possible directions for SPD in large tour operator businesses

The research process employs a case study methodology and semi-structured interviews as the method for data collection (Yin, 1993). The investigation of the case study takes an inductive approach, by designing the interview questions not for testing predetermined factors, but asking the interviewees how they conduct their operations, why certain procedures prevail and why other actions are absent. Explanations of the phenomenon are later analyzed with the support of relevant literature. Using an inductive reasoning (Flach, 1998), conclusions make a more general explanation for the absence of sustainability-driven improvement in the product development of large tour operators. As the study investigated *existent* tourism products and processes, a generic service development framework was more suitable to use than models of *new* service development in tourism (Decelle, 2004; Hallenga-Brink & Brezet, 2005; Jones et al., 1997; Weiermair, 2004).

Ex ante evaluations of opportunities and their feasibility requires key informants for these investigations to be among those who influence such changes. Therefore, semi-structured interviews were conducted with managers from marketing, communications, environmental and product development departments, destination operations (for each of the two products) and the tour guide of the specialized package. Aiming to reduce the social desirability bias that can alter respondent answers (Leggett et al., 2003), interview questions were indirect to the issue of sustainability and the information was triangulated with additional interviews with suppliers and the researcher's observations. A total of eleven interviews were performed, recorded and transcribed within 24 hours.

Case description

The case study selected for this investigation is TUI-Nordic, formerly known as TUI-Nordic AB, a Swedish based subsidiary of the TUI Group. The company has a high profile in sustainable tourism (under the brand of TUI-Nordic AB), being one of the first tour operators to issue a sustainable tourism policy in 1998 and a founding member of the Tour Operators Initiative for Sustainable Tourism, together with UNEP and prominent European operators (Budeanu, 2005). Active in four Nordic countries – Sweden, Denmark, Finland, Norway – TUI-Nordic is one of the largest tour operators in Scandinavia, covering several operating brands including Fritidsresor, Star Tour Norway, Star Tour Denmark, Finnmatkan, TEMA, Sportresor, Prisma, Grand Tours, Britannia Nordic, Britannia Ticket.

Findings

The starting point for this investigation was a pseudo production (Martinez-Ros, 1999) of sustainable holidays by tour operators, with the main objective of identifying whether organizational conditions favor or hinder possible sustainable improvements. Main explanatory variables for sustainable product improvements used for the analysis are the ones identified from the literature and presented above in Table 2.

Market conditions

One important trigger for environmental product development is the demand from external stakeholders. Mature markets, such as tourism (Gustafsson & Johnson, 2003), are characterized by high demand for new products and the adoption of innovation as a pathway to gaining competitive

advantage (Jones et al., 1997). Environmental or sustainability improvements have been recognized to have significant competitive value (de Bakker, Fisscher, & Brack, 2002). However this is not found to be the case for tourism where the customer demand is low or absent. The general attitude of interviewees can be described as “*Why fix something if it is not broken?*” as both products have been successful. The products were described by the managers interviewed as:

The TEMA Thailand Runt is a package that enables tourists to see places they have never seen before and acquire a memorable educational experience. It targets tourists with little experience of traveling, offering a superficial but rich overview of special features and local contexts, in safe luxurious settings. The concept of offering cultural Thai experiences is unchanged since its launch and only small variations are made in the visiting program. With a high rate of repetitive customers over the past 16-17 years, the package is a very successful product for TUI-Nordic.

The conventional package Destination Phuket is a conventional a ‘sun-sand-sea’ holiday package, developed to provide a platform for tourist access to Thailand, by securing affordable flight, transfer and accommodation. The product idea has been successful and has not changed over the past 10 years, except of few alterations of location.

Finding new destinations (Mattsson et al., 2005) seems to be enough novelty for tour operators, and there are limited incentives for sustainability driven innovations or improvements, as confirmed by previous studies showing the leading position of Scandinavian operators in the environmental field (Budeanu, 2005). For the mass market, competition may act as a trigger for the development of new products but only to a limited extent (Martinez-Ros, 1999). Reasons mentioned by the interviewees were the absent economic justification due to the lack of customer demand and the hardship of finding suppliers with good environmental performance.

Organizational antecedents of sustainable improvements

Product-oriented corporate environmental policy

Environmental policies that make explicit reference to the role of product development are essential for eliminating inefficiencies (Berchicci & Bodewes, 2005). The sustainable tourism policy of TUI-

Nordic¹ conveys an open commitment to being a responsible company, a good neighbor, protecting travel destinations and supporting international initiatives for biodiversity and culture conservation, the policy of not refer specifically to developing sustainable holiday packages. In 2000 when the company was purchased by TUI-Group the reorganization ‘moved’ most decisions related to environmental work to the corporate headquarters in Germany. The environmental responsibilities of TUI-Nordic were further reduced after the financial downturn, to general customer communication, the maintenance of sustainable tourism policies, and the continuation of activities already started, such as the certification of the Blue Village resorts with the ISO14001 certificate.

Sustainability and innovation-oriented organizational culture

Organizational support is essential to the emergence of ideas for product improvements (Wren, Souder, & Berkowitz, 2000) and for the support of new processes in incipient stages. At the same time, taking ethical considerations into consideration in the management of a company’s human resources is also found helpful for the creative potential of the organization (Walker & Dorsa, 2001). The importance of sustainable tourism is well known among the company managerial team. Each of the managers interviewed – communications, TEMA product development, conventional product development, environment-responsible person, marketing and sales – showed a personal attachment to caring for environmental and social consequences of tourism.

However, these concerns are not formalised. One reason may be the unfamiliarity of managers with the term of ‘sustainable product development’. In practice however, managers in TUI-Nordic have a high environmental awareness and appreciate the opportunities for environmental improvements, but without associating them with a specific procedure or process. This suggests that while environmental awareness acts as a facilitator, it is not sufficient to trigger for action. The TUI-Nordic staff in destinations is highly supportive of local projects with sustainability goals and is willingly to dedicate their personal time to support such initiatives. They also organize local charity initiatives such as donations of clothes and occasional office equipment. However, the local office has no eco-efficiency rules with regards to its operations, for instance waste separation or paper recycling. The absence of such procedures is justified by the absence of recycling systems in the city.

¹ More details about TUI-Nordic sustainable policy, online at <http://www.fritidsresor.se/36665/Om-foretaget/27541/27623/>

Market intelligence and business foresight

A company's ability to recognize the readiness of the market for sustainable products can bring a tremendous competitive advantage. With respect to environmental improvements in tourism, there is a lack of reliable information about the environmental sensitivity of tourist segments and their willingness to pay for sustainable holidays. This was identified by interviewees as a bottleneck in advancing product development and few changes were considered possible until this information will be available. Furthermore, the high awareness of Scandinavian clients is considered to reduce the competitive value of environmental holidays, because customers expect services with high environmental performance by default.

For the specialized TEMA product, the possibility of expanding the concept from *providing* secure access to exotic places, to *creating* controlled authentic experience that also contribute to the well-being of destination communities is considered an opportunity by operational managers of TUI-Nordic. Although the acceptance by consumers of such products is not known, managers identify a potential competitive advantage from pioneering sustainable holiday markets, at low risks and minimal organizational changes for the company. However, managers sharing this opinion do not have the legitimacy to translate it into practice. According to the marketing manager, the temptation to try new product ideas is high, but is suppressed by:

... a characteristic dilemma for charter businesses, of choosing between uncertain profits from new products and the necessity to secure at least 97% of flight occupancy, which is the break-even point for profitable flights.

The high costs of air transportation give higher priority to the latter, so the only chance seen for new products is by creating clever combinations of services, activities or locations. Without information about the market uptake for environment- or sustainability-oriented conventional holidays there are small chances that product development would take this path.

An important source of ideas for improvements of products and processes is a company's own research and development, a resource-intensive function that is generally found in large companies. However, research and development departments are seldom seen in tourism (Hjalager, 1997; Jones et al., 1997) and the process of innovating is generally done *ad-hoc* or in an unstructured manner

(Gustafsson & Johnson, 2003). The absence of such a function puts a lot of burden on the marketing department, to identify and create new concepts in accordance to the market trends, as this research showed. Although successful, this strategy does not offer a foresight capability useful for business survival.

Functional interface

Through its cross-functional nature, product development is associated with the existence of cross-functional teams and interdepartmental cooperation, processes also known as functional interface (Pujari et al., 2004). Besides providing increased resources for product development, a functional interface is also beneficial for later stages of product marketing and commercialization (Baumann, Boons, & Bragd, 2002). TUI-Nordic has consolidated their leading position on the Scandinavian tourist market by acquiring TEMA, a nature-specialized tour operator. However the production of specialized and conventional packages is done separately and according to the interviewees:

Although their market segments overlap to a certain extent, there is no information exchange between the organizations involved in the development of the two products.

Apart from sharing the use of marketing resources, no inter-departmental cooperation was noticeable to have a connection with sustainable improvements of products or processes, and these remain either informal or non-existent. The situation was different in destinations where there is a certain degree of cooperation between staff responsible for each of the products, mostly informally, by sharing relevant information.

Process / product characteristics

The flexibility of the holiday process

Having flexible procedures in the company eases the process of improvement (de Bakker et al., 2002). The procedures for holiday development at TUI-Nordic are well consolidated with well-trying routines. Therefore there is a noticeable resistance to changing them especially without an urgent demand for it, which clearly hinders initiatives for sustainable improvements. One noteworthy aspect of the products is the customers' freedom during holidays. For the specialized TEMA product, the program is pre-planned from departure until return, and includes flights (international and local), accommodation (mostly in luxury hotels), local transport by bus, most meals and visits

to local attractions. Visits are short and take place under the supervision of the tour leader (guide). For the conventional package Destination Phuket, there is no pre-set program with entertaining activities (excursions, events), so customers have total freedom to do what they desire. This setting gives the operator control over the tourist experience in specialized products and almost no control in conventional holidays.

Supplier involvement

At the time of the study, TUI-Nordic did not apply specific environmental or social criteria for supplier selection. Finding suppliers with good environmental performance is considered difficult by the management of TUI-Nordic. However, staff in destinations claimed the opposite but expressed doubts regarding the effectiveness of certain environmental activities done by local hotels and excursion providers.

In conventional mass tourism destinations, the dominant occupancy by clients of TUI-Nordic made suppliers attentive to the operator's environmental suggestions. Although no contract was suspended because of unsatisfactory environmental performances, some suppliers from promiscuous areas are purposefully avoided. For specialized TEMA packages, where their clients represent only a small share of their occupancy, the tour operators' demands for environmental activities are less visible. As one interviewee mentioned *'Having only small groups, we don't make a difference when speaking to large hotels for example. We are too small for them'*.

A positive note came from the local guide, who noticed that almost everywhere in Thailand, large hotel chains – like the ones used for hosting TEMA clients – already have environmental policies in place. According to the researcher observations, even in hotels where environmental policies were on display everywhere, there was no sign of them being applied, as towels were changed regardless of customer choice and there was no possibility of adjusting / reducing the air-conditioning system to the conditions outside, all running at full capacity all the time. The shy response of hotels with regard to environmental improvements is attributed to the lack of understanding by local businesses of why tour operators or their customers care for the use of resource and the creation of waste.

Even when we explain why and how it should be done, it is difficult for them (hoteliers) to understand the utility of making environmental improvements. And then they do not know what to tell their staff that does not even know what we ask for.

Although maybe valid for the accommodation, it is the personal observation of the researcher that suppliers of other tourist services such as excursions and transport were much more aware, concerned and active in environmental field.

The type of product

Combining cultural and environmentally oriented tours with entertaining activities is not considered suitable for conventional packages but for specialized holidays. TEMA products are considered more profitable for local communities than conventional charter packages, as they provide jobs and income for many local providers. However this estimation is highly arguable. In line with the company's priority for customer safety and enjoyment, TEMA excursions are commonly arranged with large, well-off suppliers, which are most likely to be among the local business elite, which is likely to concentrate the tourist income in the hands of rich businesses instead of permeating to the local community.

Involving stakeholders

Destination staff has the responsibility of creating and maintaining the contact with local businesses and authorities, in order to secure a good quality of service provision and customer satisfaction with the experience. The small TEMA groups are not significant enough to influence the destinations they pass through, apart from very specific businesses, such as museums, jewelry, pottery and silk workshops. They are however the only source of income – thus extremely well regarded – in small number of communities throughout the country. However, according to the tour guides, the constant visits by tourists brought – besides a relative wealth, a change in lifestyle, by reducing the incentive of the small community to do anything else but wait for tourists.

A better way would be to rotate our groups and visits between different villages so that they do not rely only on us. However some are hard to access especially in high rain season.

Maintaining relations with the local community in destinations is the responsibility of destination manager, and requires a long time efforts. In mass tourism destinations such as Phuket, the manager of the incoming operator who organizes the local activities is well known and has earned a good reputation and respect from local businesses. His advice and suggestions are well regarded in the business community giving legitimacy to the demands of the tour operator, especially in the context of the Thai culture which respects hierarchical structure. As the manager said:

Because I am always here, I am perceived as one of them (Thai people) nowadays. And this is good for doing business. But when it comes to this kind of requests suppliers tend to listen much more if it comes as a letter directly from Stockholm with the company letterhead on it.

Despite difficulties, TUI-Nordic staff in Phuket sees the attitudes of Thai businesses changing over time, and are confident that pressures for environmental and social practices in tourism will increase. The few suppliers interviewed during this study expressed consistent opinions that tourism (as it done now in the area) has worsen the environmental and life quality for locals, increasing air and water pollution, noise and congestion, diverting workforce from other sources of income such agriculture.

You would not believe how Phuket was like, 10 years ago. The air was clean, there were a lot of trees and I thought this is the perfect place to raise children – says on supplier. Now it has become one of the most populated, crowded and polluted coastal area of Thailand, and you can barely see Phuket from under the tourist-Phuket.

Environmental demands from tour operators are recognized as a strong incentive for suppliers to improve their performance, but they rarely come and suppliers are convinced that drastic measures are necessary to reduce damages induced by tourism.

Management of customer information

With regards to the presence of environmental or social elements in customer relations, the TUI Nordic strategy is to focus on informing about the company's sustainable tourism policy and its support and affiliation to high profile international initiatives such as ECPAT (against child prostitution), WWF (protecting natural and cultural diversity), UNESCO (protecting cultural

heritage) and UNEP (protecting environmental quality). At the moment of this study there was no intention of adding more environmental or social information on tourist materials. Environmental information about the TUI resorts is still not easily accessible to the customer and must be well searched for in the brochures.

Prior to purchasing the package, TUI-Nordic provides general information through the website and some parts of the brochures, with respect to their affiliation to international programs of environmental or social protection. The specialized TEMA package is a “culture and history” product, and it is considered to make a good contribution to sustainable tourism as it is, by educating customers.

On long-haul flights TUI-Nordic presents a video with information about their specific projects in Thailand, such as local support for nature conservation. Very interesting video information is provided on the return flight, giving details about environmental and social issues in Thailand, and the impact that tourist may have through individual consumption, with very good, simple and concise information (by the personal evaluation of the researcher). However, being broadcasted on an overnight flight, many passengers miss it being asleep.

At the destination, the main source of information becomes the tour operator staff, in addition to printed information about the TUI-Nordic environmental projects in the region. The information is generally displayed on the hotel reception desk and is freely accessible, though (by the opinion of the research) not visible enough to attract the attention. However the quality of the information is high with attractive layout, and tells about TUI Nordic environmental activities, codes of conduct, guidance on unsustainable souvenirs made of endangered species. For specialized TEMA packages, the information about the country comes almost exclusively from the local guide. As a couple of customers declared:

This is our fourth trip with TEMA, and we know the guides are well prepared so we wait for them to tell us about the country and then we read more from guidebooks. At least then we know what to look for because we've been there!

The information related to personal consumption of tourists – such as water or energy saving messages – they remain the decision of the service provider. Despite the occasional messages in

some hotels, the actual savings were not visible in hotels. The likely consequence is the reduced credibility of tour operator and hotel claims for environmental care, and less action taken by the customer. Overall, the information on sustainable tourism is of general nature, and was considered sufficient for the time being. According to TUI-Nordic management, more information will be available when more completed projects will be in place. The strongest stand is taken by TUI-Nordic on its commitment to supporting ECPAT:

We don't need customers that look for such activities, even if it may costs us selling a few excursions!

This may be a missed opportunity considering the potential of tour operators to create experiences (staged) and steer them towards provoking the emotional response desired (Ooi, 2003).

The myth of 'upsetting tourists'

The general fear that providing information about tourism impacts to customers would spoil their holiday mood and ultimate satisfaction with the holiday is not confirmed by this research.

According to TUI-Nordic staff and suppliers, customers do not ask for such information and may do wrongful acts that affect nature. However once told, tourists do not get upset and correct their actions or attitudes, presenting a positive attitude due to their high awareness. Two of the suppliers of TUI-Nordic, a trekking company and a diving instructor, educate tourists about local biodiversity, explaining how tourist actions (e.g. throwing plastic bags into the sea, collecting coral or endangered flora species) may lead to negative impacts and biodiversity loss. When shown real examples of damages done to the coral ecosystems and asked to refrain from such actions, tourists react positively and strong, especially children.

Tour operators *control the risk* of disturbing customers by keeping organized tours short and well programmed in advance, with minimal interaction between guests and locals, intermediated by local guides. With core services provided covered (accommodation, food, transport) tourists have limited needs – and practically very little time – to create other contacts with Thai locals apart from the front staff of hotels, couch drivers or local guides. Both marketing and product managers for Thailand, agree that customers need to be made aware of the effects their visits have on destinations and they should be asked to contribute reducing the impacts. According to staff in destinations customers are already changing their perception of holidays as simple leisure time and welcome more information on what can they, as individuals, do to reduce the harm from their travel.

The role of skills and knowledge

Information, skills and knowledge have key roles in product development as well as in environmental or sustainable improvements (Jones et al., 1997). Especially for tourism, information is part of the product and not just an accompanying feature, by creating the context for customer experiences. Following the product development processes the researcher made three observations:

- the knowledge and interest at the headquarters about the environmental quality in destinations is rather limited, despite general environmental awareness of management;
- staff in destinations have a tremendous amount of knowledge but they are rarely asked to use it formally;
- the knowledge of suppliers is not used.

Destination staff receives training on environmental issues, once a year. Among their responsibilities, they provide customers with environmental information (produced in Stockholm) such as brochures about UNESCO and ECPAT. Besides explicit information and communication, tacit knowledge is also important in environmental improvements in product development is noted especially for incipient stages (Baumann et al., 2002; Subramaniam & Venkatraman, 2001). This is used by tour operators in the form of previous experience of its staff. The most obvious advantage was having a marketing manager with a good environmental experience, able to understand potential demands for environmental or social performances. Besides own employees, suppliers also are an important source of tacit knowledge for tour operators. A good example was noted during an interview with a provider of diving tours. Discussing the problems caused by plastic litter to the sea biodiversity led to a discussion about available alternatives locally. In a short time, the supplier came up with the alternative of wrapping sandwiches in banana leaves, and found this alternative to be much cheaper, biodegradable and more attractive for customers. The idea was considered feasible to implement within a week.

Concluding remarks

This investigation had the purpose of identifying organizational antecedents for sustainable improvements of holiday products and process, by the tour operators. In the absence of already established frameworks for analysing such procedures, this research followed the development of

two different holiday packages, a specialized one and a mainstream conventional one. The main opportunity for developing sustainable products is the availability of smaller suppliers (and potentially larger ones too), who already have a good environmental profile. Encouraged or supported by tour operators, they have good chances to improve further and be able to provide environmentally friendly services to customers. However, a formalized sustainable product development is unlikely to be adopted by tour operators in the near future.

Table 3: Identified challenges (-) and opportunities (+) for SPD by large tour operators

External conditions		Organizational antecedents		Product / process characteristics		Customer relations characteristics		Skills & knowledge	
Customer demand	-	Product-oriented environmental policy	-	Flexibility of production process	-	Synergies with environmental strategies	-	Available skills	+
		Organizational culture	+	Supplier involvement	-	Risk management	+	Tacit knowledge	+
		Market intelligence (R&D)	-	Type of product	n.a.				
		Functional interface	-	Involving stakeholders	+				

Table 3 presents a summary of the findings reflecting potential challenges generated by the absence of some antecedents for sustainable product development; the presence of the antecedents is marked as an opportunity.

There are a few significant challenges that prevent the adoption of SPD, such as the absence of customer demand for sustainable holidays and the organizational resistance to change (especially when not seen necessary). Probably not uncommon there are several possible explanations for this status, as shown by this research, in the absence of more general studies into the potential customer demands and market trends related to sustainable tourism, the lack of involvement of suppliers (losing their tacit valuable knowledge) and the absence of functional interface between the product development process and the environmental one. However these barriers are easier to overcome once corporate strategies will identify value in targeting sustainable and customer management and product development. A long-term business strategy may recognize the value of developing the demand for sustainable products instead of waiting for it to emerge organically. The advantage of

having a great deal of the necessary skills and knowledge embedded in the staff knowledge, is an invaluable asset, unused but recognized already by competitors from other markets.

The customer acceptance and willingness to pay for products with high environmental or social performance remains uncertain. However this may be caused by the lack of information more than the factual opposition of tourists and this issue will remain a challenge for sustainable product development. Tour operators need to consider the success of other packaged tourism offers, such as rail packages, which gain acceptance fast. The fact that 88% of European tourism takes place within Europe (Leidner, 2007) indicates a great opportunity for such offers to become rival substitutes to products of tour operators. Alternative modes of traveling and tourism are also the preferred products of the “55+ age group” that will almost double in the next decade which increases the pressure on tour operators to adopt new concepts for products.

The assumption that sustainable product development, as a process, is not applicable to large companies has not been confirmed nor refuted by the findings of this research. While a few of the managers recognized the concept and the implications of it, it did not penetrate the rigid procedures installed in the company. In previous investigations it was also suggested that mentioning responsibility or sustainable tourism would spoil the mood of tourists, fact which is refuted by this study. It is the belief of the researcher that such claimed customer sensitivity may be overestimated due to the lack of factual information about their reactions.

The relative comparison between the two holiday products showed that there is no way of telling which package is better without detailed impact analysis. Specialized packages are considered responsible-by-default because they bring visitor income to local suppliers and bring cultural awareness to tourists. However, these contributions are arguable since income tends to concentrate in the hands of a few privileged suppliers. With conventional packages, customers move freely and distribute their income wider. The simple introduction of a rotation system between visiting attractions is one way of spreading the tourist income in the local community.

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