0 Abstract

Globalisation and the development of the information and telecommunications technologies are creating new rules governing competition: we are witnessing the beginning of a Net Economy. Newly configured customer/performance systems are leading to the transformation of industries and companies. The borderlines between the industries within tourism are dissolving, and the scope of companies’ activities is changing. New forms of cooperation are required. Often, the value added by the core business is no longer sufficient, and there is a demand for new commercialisation models. The coercion to achieve growth, which is driven by the capital market and the constantly increasing critical corporate sizes, requires new entrepreneurial dynamism. As a consequence, conventional corporate models of destinations, hotels and funiculars in traditional tourism countries often generate negative results.

This paper seeks to demonstrate how the transformation driver, IT, may also make a contribution towards shaping the transformation process in an entrepreneurial manner and, in doing so, arrive at a comparatively higher level of competitiveness. New performance systems are outlined, and value drivers identified, on the basis of a process model which, in turn, is based on the evolving net economy. A special focus is aimed at the examples of marketing and the establishment of customer contacts.

Keywords: IT, Net Economy, Transformation Process, Value Drivers
1 Introduction

1.1 Point of departure:  
**New Tourism vs. SME structure in major receiving countries**

Regarding the question as to what the most important determinants of the development of the economy and of society might be, the mutually conditional elements of deregulation, technologisation and globalisation will readily come to mind. They are leading to a "**new tourism**", which can manifest itself in various shapes and guises (cf. Table 1).

<table>
<thead>
<tr>
<th>Cause</th>
<th>Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>✦ Supply is transparent worldwide; customers take their bearings from international offers as &quot;global customers&quot;, as it were.</td>
<td>✦ Pressure in the direction of quality, optimal prices and an efficient use of time with regard to tourist offers.</td>
</tr>
<tr>
<td>✦ The leisure time available to the active and income-creating part of the population is becoming increasingly scarce.</td>
<td>✦ Compulsion to create integrated offers with optimal service chains.</td>
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<tr>
<td>✦ Demand for multi-optional offers.</td>
<td>✦ Flexible purchasing structures and reduction in the degree of standardisation.</td>
</tr>
<tr>
<td>✦ Individualised masses instead of mass tourism.</td>
<td>✦ Safeguarding of options in a customer-oriented network.</td>
</tr>
<tr>
<td>✦ New information technologies enable the creation of business plugs (exchange platforms).</td>
<td>✦ Novel divisions of labour between the various levels of performance.</td>
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<tr>
<td></td>
<td>✦ Integration along customer-oriented service chains.</td>
</tr>
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<td></td>
<td>✦ Providers’ concentration on core competencies.</td>
</tr>
<tr>
<td>✦ Communicative inundation.</td>
<td>✦ Traditional marketing instruments are increasingly losing their significance.</td>
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<td></td>
<td>✦ Increasing significance of community marketing.</td>
</tr>
<tr>
<td>✦ Interlinkage of economy and society.</td>
<td>✦ Every member of society has an increasing number of options; a multi-option society is evolving.</td>
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<td></td>
<td>✦ Dissolution of traditional structures and values.</td>
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<td></td>
<td>✦ Increased competitive pressure and new forms of resource exploitation (monogamous to polygamous employment; possession of corporate premises for facility management).</td>
</tr>
<tr>
<td></td>
<td>✦ New corporate models (broad horizontal business sphere combined with a lower production depth).</td>
</tr>
</tbody>
</table>

*Source: based on Poon, 1993; Gross, 1994; Bieger, 2000a; Weiermair, 2001*

With that transformation to new tourism, the competitive conditions for the "traditional" form of hospitality have significantly changed. For several reasons, the pro-
Tourism in the New Economy

The production structure in tourism has not yet matched those developments adequately. The resulting and still topical disadvantages in terms of productivity are mostly based on the predominant SME structure of the hospitality industry (cf. Table 2).

### Table 2: Causes and impacts of SME structures in tourism

<table>
<thead>
<tr>
<th>Cause</th>
<th>Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Companies are mostly shaped by their owners; in many cases, the dominating production methods are largely craftsmanlike and thus not greatly rationalised and clearly structured.</td>
<td>Inefficient and ineffective management; hardly any adjustment of entrepreneurial capacities and behaviour.</td>
</tr>
<tr>
<td></td>
<td>Insufficient adjustment to leadership styles.</td>
</tr>
<tr>
<td>The potential of investments in concepts is comparatively low owing to a lack of multiplication opportunities.</td>
<td>Lack of professional knowledge development.</td>
</tr>
<tr>
<td></td>
<td>Problems related to product development and quality management; including missed market opportunities (in terms of new strategies and positioning).</td>
</tr>
<tr>
<td>Companies take their bearings largely from the industry's own standards and solutions.</td>
<td>Insufficient profiling and positioning.</td>
</tr>
<tr>
<td></td>
<td>Problems related to quality management.</td>
</tr>
</tbody>
</table>

Source: based on Bieger & Laesser & Weibel, 1999; Weiermair, 2001

#### 1.2 Approach to productivity analysis: the company as a value chain

Contrary to the classic model of an (industrial) value chain (Porter, 1992), services are generated – particularly in the complementary performance system of "tourism" – in the form of a chain that is a process with a sequence of activities directly aimed at customers (Bieger, 2000a).

A distinction must here be made between the following levels:

- At a **micro-level** at the **front** (frontstage), the customer establishes direct contact with the service provider. At every link of the business-unit-specific service chain, interaction processes are generated. These are actual **core processes**; only through these is it possible for an integrated, process-oriented service to be ensured which contributes to a positive consumer experience and thus adds value. The individual interaction process involves four typical universal processes (Walter-Busch, 1996):
  - **evoking** energies,
  - **interacting**,
  - **integrating**,
  - creatively **emerging** personal development.

- Various services within the service chain of a business unit or enterprise unit determine the frontstage at a **meso-level**. Each of these elements contains one or indeed several micro-processes as described above. The backstage does not only ensure a service-enabling support but also the prerequisites and the general
framework which allows for a business case to come into existence in the first place.

At a macro-level, it is subsequently not only the individual service chains of the business/enterprise units which are customer-specifically interlinked (for instance with regard to marketing) but, in analogy and wherever this makes sense, also support processes, such as know-how or central services.

Table 3: Process Model

<table>
<thead>
<tr>
<th>Back Stage</th>
<th>Front Stage</th>
<th>Support-Process</th>
<th>Service-Chain</th>
<th>Supporting Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Supporting Activities</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Marketing, Finance &amp; Controlling, Resources (human and other), ...</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Business/Enterprise Unit

Customer/ Moment of Truth

Interaction

evoking

interacting

integrating

emerging

Interaction

Marketing Network

Finance Network

Consumer Network/ Total Service Chain

Know-how Network

Source: Author's illustration based and adapted from Bieger (2000a) and Bieger & Laesser (2001b)

Owing to the changed general framework, a company must not only be in a position to coordinate its internal network but must, in the wake of additional interlinkages, also create (and permanently extend) skills which enable it to function adequately in an external network. The consequence and expression of this development is a fragmentation of the entire service provision process. Not only are or should internal
processes be provided in an actual network, but the entire processes which will ultimately make up the service product are provided in a network involving various companies.

According to the levels of the above process model, the IT-driven and IT-enabled potentials for an increase in productivity are represented and evaluated below:

- **Macro-level**: perspective of inter-business-unit networks (with the illustrative focus on marketing).
- **Meso-level**: perspective of the relations between frontstage and backstage within a business unit.
- **Micro-level**: perspective of the relationships between customer and service provider within a link of the service chain and between individual links of that chain.

Particular attention will be paid to the macro-level.

### 2 Macro- and meso-levels: the approach to a "Net Economy"

#### 2.1 Framework

**2.1.1 Introduction: from Value Chain to Value Net**

Business activities increasingly aim not only to add value but also to **reinvent value**, thus turning away from the isolated perspective of positioning a fixed set of activities. In strategic analyses, in particular, this forces companies to focus not only on themselves or their industry, but to start out from an actual value-creating system which involves various economic players such as suppliers, business partners, customers, etc. All the partners work together and add value through co-production. The main strategic task is thus a reconfiguration of roles and relationships in the players' existing constellations. The **value net** brought about by this can be defined as follows (Bovet & Martha, 2000):

"A value net is a business design that uses digital supply chain concepts to achieve both superior customer satisfaction and company profitability. It is a fast, flexible system that is aligned with and driven by new customer choice mechanisms. A value net is not what the term supply chain conjures up. It is no longer just about supply – it's about creating value for customers, the company and suppliers."

The "value net" concept is thus not so much about providing a service along a value chain (as it were, in the sense of sequential structuring) but of creating the best possible and most cost-efficient product in the sense of "cherry picking" from existing value chains and systems and on the basis of optimised support processes (cf. Table 4).
The characteristics of the value net (cf. Table 4) generate a business design which is completely new in competitive terms and establishes new rules for competition.

Table 4: From value chain to value net

<table>
<thead>
<tr>
<th></th>
<th>&quot;Traditional&quot; Service Chain</th>
<th>Value Net</th>
</tr>
</thead>
<tbody>
<tr>
<td>Customer</td>
<td>Customer = Receiver of Output (one product for all customers)</td>
<td>Customer = Initiator of Output (&quot;customized solutions&quot;)</td>
</tr>
<tr>
<td>Sequel of productions steps</td>
<td>Cooperative, system-based production</td>
<td>Agile and scaleable</td>
</tr>
<tr>
<td>Rigid and inflexible</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Static and slow</td>
<td></td>
<td>Quick (just in time; at short notice)</td>
</tr>
<tr>
<td>Analogous</td>
<td></td>
<td>Digital</td>
</tr>
</tbody>
</table>

Source: authors' illustration based on Bovet & Martha, 2000

It should be added here that, by way of an alternative to the value net model, similar approaches have been discussed, for instance the Value Web Model (Selz, 1999) or the Value Constellation Model (Norman & Ramirez, 2000). However, all the approaches are inspired by the same basic idea – the dissolution of the traditional value chain, cooperation between industries at various levels, and the involvement of customers in the provision of the service.

2.1.2 Process: Unbundling the value chain

The transformation process may run along various paths (cf. Table 5):

- **Intermediation:** According to Evans/Wurster (1997), intermediation is tantamount to splitting up the value chain into individual activities. This means that companies
Tourism in the New Economy

limit themselves to small parts, and in extreme cases to one activity, of the value chain.

♦ Disintermediation: The theory of disintermediation posits that the new information and communication technologies eliminate intermediary stages, which means that the value added can be optimised. Disintermediation theory must be clearly separated from the approach of vertical integration, which provides a company with the control of the entire value chain. By contrast, disintermediation provides a player with the control of a level of value creation (Whinston & Stahl & Choi, 1997).

These two theories represent either end of one continuum. The question as to the "better" strategy cannot be easily answered. Both approaches offer different advantages.

The tendency towards intermediation, in particular, fosters the emergence of so-called "infomediaries", who specially take over the coordination of information and transaction flows between individual network partners that are concomitant with e-commerce (Hagel & Rayport, 1997).

Table 5: Intermediation vs Disintermediation

<table>
<thead>
<tr>
<th>Intermediation</th>
<th>Disintermediation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unbundling of value chains</td>
<td>Elimination of certain elements in a given value chain</td>
</tr>
<tr>
<td>Focus on a certain step in the value adding process</td>
<td>Coordination of a number of value-adding activities</td>
</tr>
<tr>
<td>Development of know-how with regard to a certain value-adding activity</td>
<td>Development of know-how with regard to the coordination of a complete value-adding chain</td>
</tr>
</tbody>
</table>


2.1.3 Virtual constructs as the basis of a future market organisation

It is a consequence of the unbundling of the value chain that identical companies act in strategic networks constituting an alliance of partners all at the same time (for instance for the solution of a segment-specific customer problem) but, outside those networks compete for the customers' favour in different areas of business and are thus still engaged in competition: co-opetition has been mentioned as a new dimension of competition (Brandenburger & Nalebuff, 1996; Schögel & Birkhofer & Tomczak, 2000; Selz, 1999). In its entirety, the alliance of business units which emerges in these networks has the character of a virtual company (Bieger, 2000b; on virtual companies, Schräder, 1996; Venkatraman & Henderson, 1998; Hopland, 1995). From the point of view of the individual business unit, a virtual company is based either on the externalisation or internalisation of resources and/or tasks (Sie-
ber, 1999 and Savage, 1996). Possible tasks in such a network are represented in Table 6.

**Table 6: Possible consequences of an intermediation process in a fractioned value net**

<table>
<thead>
<tr>
<th>Brand Holders</th>
<th>Processing Specialists</th>
<th>Design Teams</th>
<th>Traded Manufacturing Capacity</th>
<th>Brokers</th>
<th>Ad hoc Supply Chains</th>
</tr>
</thead>
</table>

*Source: o.V./MIT, 2000*

The **success** of this virtual construct is based on the following factors (Bovet & Martha, 2000):

- an expansive vision,
- a narrowly defined scope,
- control over the management of the value net.

### 2.2 Tourism in the Net Economy

The concept of co-opetition and the characteristics of virtual companies have long manifested themselves in the tourism industry in various degrees of professionalism and depth. Thus the insight that a product’s success basically depends on the structure of the network of independent, cooperating companies, has been prevalent for some time (Gatrell, 1991; Kotler et al., 1996). Here, too, players are not completely independent of each other. To make a destination product adequate, for instance, each company instils part of its core competencies into the overall product – whereas in certain dimensions of their business activities, the same companies remain independent.

The virtual organisation (and thus the concept of co-opetition) is particularly relevant for the tourism industry: since the industry characteristically consists of SMEs (particularly in non-anglo-saxon receiving contries), which, in turn, means that the resources are limited, many activities must be outsourced. If, by way of countermove, individual providers inject their specific skills in a product and in the accompanying service provision process, then this virtual company will be able to profit as a whole (Palmer & McCole, 2000; Bramwell & Lane, 2000). Thus it is also generally argued
for SMEs that those companies will be successful which open themselves to the outside, i.e. which cooperate with other firms (Perry, 1999).

The supply-side network effects which occur in this context are largely based on support processes at the meso-level and consist of, say, improved purchasing conditions in contrast to more up-front performance levels, better division of labour, better distributed investment in research and development, etc. They lead to decreased marginal costs and tend to be limited, for instance by the fact that at some stage, the absolute cost minima will be reached (Shapiro & Varian, 1999).

In tourism even more than in any other industry, the furthest-reaching consequence of this unbundling and the establishment of virtual companies consists in its convergence with other industries. The borders between and limitation to industries are losing their significance. This is primarily due to the fact that the borders between the quantitative and qualitative drivers on the supply side are increasingly difficult to discern. It may be expected, for instance, that the increasingly frequent and intensive overlaps between working time and leisure time – leisure time is increasingly difficult to demarcate clearly; a convergence is emerging in terms of time – will entail adaptations of spare time activities and thus also adaptations in the demand for tourist services and offers (Gross, 1994). Convergence will possibly occur between tourism and the health and education industry.

Not least, this development has far-reaching consequences, for example with regard to customer relationship management (CRM) (cf. Chapter 2.4.2.3).

A chimera to be addressed in that context is the widespread thinking in terms of pure organisational forms of markets, hierarchies or networks. It must be assumed that pure forms rarely exist in reality (Selz, 1999); therefore it would be dangerous to assume that in the future, there would only be network structures. In the past as in the future, mixed-mode relationships will be encountered (Holland & Lockett, 1997). The findings of Holland and Lockett (as of Clemons & Reddi, 1993, too) suggest that high levels of market complexity require a coordination strategy based on more hierarchical elements, whereas relatively simple transactions would give market mechanisms a greater chance.

As for tourism, and keeping in mind the existing SME structure, there is now a consensus both among organisation theorists and practitioners that the "network organization" in any possible structural configuration will remain the most viable form of organisation to deliver a tourist product (Weiermair, 2001).

In the net economy, there is not only (as we have just seen) a supply-side trend in the direction of logistic networks and virtual companies, but also a demand-side trend towards the establishment of customer networks. This involves, say, a sense of belonging to a scene or a community, which tends to be generated sociologically and/or through brands and values. Communities are of central relevance to touristic marketing, in particular (cf. Chapter 2.4.1).
The matching between supply-side and demand-side networks generates new market structures, as shown in Table 7.

Table 7: Possible configuration of tourism in a net economy

<table>
<thead>
<tr>
<th>Portal/Infomediary A</th>
<th>Portal/Infomediary B</th>
<th>Demand-Side Networks/„Communities“</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supply-Side Networks</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Authors’ own diagram

2.3 The role of IT in the value net

Information technology in general and electronic commerce in particular have facilitated new means of organising and linking the production and consumption process in general and the development of virtual organisations in particular. They are more flexible and responsive than traditional organisational structures, mainly, but not only, because of “computer-mediated communication” (Hoffmann and Novak, 1995; Barnatt, 1997). IT allows richer and more complex forms of mixed modes to be managed, depending on the competitive environment.

Markets in consequence become, by the input of IT, at least partially virtual. Virtual markets refer to settings in which business transactions are conducted via open networks based on fixed and wireless Internet infrastructure. These markets are characterized by:

- high connectivity (Dutta & Segev, 1999),
- a focus on transactions (Balakrishnan & Kumara & Sundaresan, 1999)
- the importance of information goods and networks (Shapiro & Varian, 1999)
- high reach of richness and information (Evans & Wurster, 1999)

The emergence of virtual markets clearly opens up new ways of value creation since relational capabilities and new complementarities among a firm’s resources and capabilities can be exploited (Amit & Zott, 2000).

The net-based virtuality of markets is tied closely to the various functions of IT, not only in their driving character but also with regard to their enabling power.
2.3.1 Enabling function of IT

It may be assumed that IT has two basic enabling functions: it creates the basis for the unbundling of the value chain in the first place and thus for the development of e-commerce (marketing-oriented), and it has a technological lock-in effect, primarily with regard to resource-oriented cooperation, and thus works as a stabiliser: joining and leaving a network is always connected with opportunity costs; thus the decision-making basis is economised.

2.3.1.1 Unbundling of the value chain: Preparing a Basis for E-Commerce

The potentials of IT make an unbundling of the value chain easier in that every link of the value chain can be split off as an independent activity and interpreted as an individual business transaction (Schögel & Tomczak, 1998). The prerequisite for this is the creation of business plugs which ensure an exchange on clearly defined and standardised platforms, thus providing the interface between individual activities such as modes and conditions of payment.

Various strategic options are available for the use of e-commerce in today's economic environment. Two dimensions play an important part in this context:

♦ focus within the e-commerce value chain,
♦ focus on existing business activities.

Depending on the combination of these strategic decisions and foci, this results in four different strategies (cf. also Table 8). There is a wide variety of alternatives between adaptation to one’s own activities on the basis of existing value chains and integration, which does not only involve the development of new value chains but also their coordination.

The wide variety of development possibilities also reflects the kind of business model in e-commerce. Depending on the degree of innovation and functional integration, varying degrees of complexity emerge. Thus it is hardly surprising that particularly in tourism, the first historical activities consisted primarily in the dissemination of information in the simplest form of e-shops. Development, however, tends in the direction of a multifunctional integration combined with a high degree of innovation. In future, holiday prototyping (Laesser, 1998) will be one of the results of innovative integration (cf. Table 9).

Table 8: Conceptual framework for the design of business models in e-commerce
2.3.1.2 Securing trustworthiness on a technological basis

The literature identifies trust and the creation of a basis of trust in networks not only as important for new governance mechanisms but also as one of the most central prerequisites for success (cf., among others, Loose & Sydow, 1994; Bullinger et al., 1995; Fontana, 1994; Kahle, 1998; Lorenzoni & Lipparini, 1999). Trust, i.e. the trust
placed in a partner in advance, forms a kind of transaction cost *sui generis* since the loss of this trust constitutes a loss class of its own (Schulze, 1997).

The use of IT in general, and the use of the business plugs connected with it, may not be able to equalise the predominant significance of trust, but at least they are able to defuse it. The technological standards connected with the **business plugs** have a **coordinative effect**, which creates advantages in terms of efficiency which, in turn, have a favourable impact on the amount of transaction costs. Belonging to a network also generates lock-in costs, whose amount is proportionate to the size (and technological characters) of the network. They consist of change-over costs in the form of the advantages lost by leaving the previous network and the costs of the adaptation to the different standards of the new network.

**The institutional – legal or interpersonal – orientation of networks** (and the transaction costs connected with this) **is thus increasingly losing its significance** (Shaw, 1997). **Informal networks can be formalised and thus stabilised.**

In an SME industry such as tourism, the interaction between (potential) network members, which owing to IT is becoming increasingly efficient, and the concomitant reduction in transaction costs can contribute towards a reconfiguration of business processes even more significantly than in big corporations, for the following reasons (Laesser, 1998):

♦ The above-mentioned business plugs are used to create a central basis for networking advantages. The gains in flexibility resulting from this will enable SMEs, in particular, to limit themselves to their core competencies and thus to improve their profitability potential, firstly on the basis of a better performance fit and the related improved readiness to pay, and secondly on the basis of optimised back-up processes and the related cost cuts.

♦ The big corporations’ edge in terms of intelligence and information may not be equalised, yet corporate size will lose its significance as a driver since on the basis of networks, and depending on the nature of the objectives, (theoretically) optimal sizes can be created in terms of the type and extent of the services and their accompanying back-up processes.

It thus makes a crucial contribution to ensuring that **suppliers’ networks** can be turned into **virtual companies** and therefore into **destinations**. Put differently: without networks oriented towards the inside, the creation and marketing of destinations towards the outside is unlikely to be possible. Thus the standardisation of the information basis for the provision of products and services creates the coordination basis that is necessary for efficient destination marketing. In this connection, IT is therefore clearly also an end in itself.

### 2.3.2 Driving function of IT

IT’s enabling function, however, also turns it into a driver.
The disintegration of value chains and the reconfiguration of value nets, which is being facilitated by IT and is thus transforming itself into something perpetual, means that all the providers of products and services are forced to evaluate themselves and their positions (on the basis of a clearly defined business model) in one or several value nets (such as destinations) continuously. In this manner, information is becoming one of the most important components of a company’s value chain (Jallat & Capek, 2001).

Through the various potentialities connected with it (particularly on the basis of the business plugs), IT is an actual driver of the above-mentioned unbundling, with the possibility of demarcating a company’s independent activities (cf. Chapter 2.1.2). When everyone is able to communicate fruitfully with everyone else, it is not only the former communication models that become obsolete, but also the business structures/models and communication channels that are based on them (Evans & Wurster, 1999).

Moreover, in comparison to traditional media, the Internet in particular combines and integrates more or less all functional properties such as information, representation, collaboration, communication, interactivity, and transactions (Gretzel et al., 2000).

It offers a powerful combination of two-way interactivity, seamless transactions, addressability, on-demand availability, and customisation (Parsons & Zeisser & Waitman, 1998).

### 2.4 IT-supported marketing as a key issue

#### 2.4.1 Point of departure:

*from the opening of new markets to community marketing*

#### 2.4.1.1 Introduction

Owing to the pronounced service character of tourism (uno actu, intangibility, individuality, interactivity; cf. Bieger 2000a), it can be described as a typical marketing business. Tourism-related services have emerged as a leading product category to be promoted and distributed to consumer markets by means of IT (Internet included) (Conolly et al., 1998; Laesser 1998; Sussmann & Baker 1996, Underwood 1996).

Marketing in general and tourism in particular increasingly take their bearings from individualisation and community marketing (cf. again Chapter 2.1.3; Bieger, 2000b). From a marketing point of view, communities have the following characteristics (Hagel & Singer, 1999; Bovet & Martha, 2000):

- **profit orientation** on the part of the "community organiser", ideally on the basis of a consumable tourism offer;
- **concentration on a theme focus**, for instance following the model of one phase of life;
connection of communication and the subject with the **objective** of further **convenience**;

consistent realisation of community-oriented **individual marketing**.

One has to be aware that communities tend to be volatile (with regard to the persons belonging to a certain community). Similar to a panel, you have a great frequency of persons who enter and leave a given group.

Communities can not least be demarcated on the basis of a life cycle model (Laesser, 2000, Bieger & Laesser, 2001a; cf. Table 10). A given consumer is therefore at one particular stage of his or her life cycle, is a member of a few communities, and has a large number of requirements. The three different dimensions present themselves as follows:

- **life cycle**: long-term, sequential, stable;
- **community/scene**: medium-term, tends to be parallel, tends to be stable;
- **requirement/consumption problem**: short-term, parallel, tends to be unstable.

Table 10: Life cycle concept

<table>
<thead>
<tr>
<th>Desire/Demand</th>
<th>Community</th>
<th>Life Cycle</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Customer</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Source:** Laesser, 2000

2.4.1.2 Handling communities and their complexity by channelled on-line marketing

Electronic commerce offers tourism suppliers who operate in such volatile markets as the one described above comparably great flexibility. The web in particular can specifically support the corresponding channel management (Stern et al., 1996; Sterne, 1996, Selz, 1999):
Community organisers can fulfill sorting functions such as sorting out, accumulation, allocation, and assorting. They might even take over the role as infomediaries (for further reference cf. Chapter 2.4.1.4), thus providing a portal service between vendors and consumers, including a transaction aggregation (Hagel & Singer, 1999; cf. Table 7). A system can support community organisers in this task, in that they are given special information and treatment.

The tasks that are specific to transaction costs, such as ordering, valuing, and paying, can be minimised due to the high standardisation of the transaction process.

The marketing channel "Web" reduces the searching costs for all parties involved: Customers (direct channel), wholesale and retail institutions (indirect channels via community organisers) each concentrate on their specific lines of trade, which increases overall efficiency and speed.

Any message can be changed very quickly. Also, e-commerce is very good at handling the clearance of perishable goods close to the time of use, and at managing specific yields per group effectively (Wolff, 1997). In best practice, customers benefit from such channels by gaining immediate gratification of their requests, greater choice, accurate and up-to-date information, and an easy-to-use interface (Pollock, 1996; Laesser, 1998). In worst practice, despite the potential for creating virtual destinations out of component organisations, the marketing of many destinations and producers appears to remain dominated by the central role of a hierarchical tourist board (Palmer & McCole, 2000).

Yet channel management in tourism requires more than simply understanding the value chain and managing the players. Hospitality companies will need to develop business measurements that effectively represent digital commerce, determining the profitability of each channel/community combination (Castleberry et al., 1998).

2.4.1.3 Distributing into communities: from GDS to GDN

The manner in which tourism companies bring their products to market remains a cornerstone of any competitive strategy. Information has become an ever more important component of a firm's value chain (Jallat & Capek, 2001). Besides, travelling has always been an information business (Schertler, 1994), and there is an intense competition for the dissemination of information (including price and availability; cf. Castleberry et al., 1998).

As a result, the competition for electronic shelf space and physical distribution channels is of critical importance in an industry where perception is reality and service is increasingly determined by a combination of technical advancements and human interaction. Technically speaking, the former GDS represented a closed, dedicated connection of professionals' terminals (mostly travel agencies) displaying travel information as a base of communication between the travel agent (intermediary) and the customer. The GDS created a distribution chain that was relatively linear, allowing each defined player to collect a portion of each transaction. Nowadays,
GDSs are a relics in a larger ecosystem of networked travel information. It is this larger structure – the Global Distribution Network GDN – that is affecting how business is done in the tourism industry. The emerging distribution model might be described as a multi-dimensional flow of information and transactions – with any intermediary in the channel able to distribute travel information and complete a transaction directly with the customer (Laesser, 1998).

However, there are still some very practical (but diminishing) limitations to completely on-line marketing, such as credit card security, assessment of product quality, privacy issues, local oriented purchasing behaviour (Weber & Roehl, 1999).

One has to identify ways in which to overcome the virtual nature of the transaction (it is in fact not only the transaction which is virtual, but the product at the time of purchase, too).

2.4.1.4 Distributing into communities: from intermediaries to infomediaries

With regard to the possible new roles in sales, one has to break down the sales transaction into its constituent elements and functions. When carried out either directly or by a third-party intermediary, a number (4) of key functions make exchanges easier, cut the costs of sales transactions, and improve responsiveness to customer needs (Jallat & Capek, 2001; cf. Table 11)

<table>
<thead>
<tr>
<th>Table 11: Intermediaries and their related functions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Function</td>
</tr>
<tr>
<td>-------------------------</td>
</tr>
<tr>
<td>Aggregation</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Trust</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Facilitation</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Matching</td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

Source: adapted on the basis of Jallat & Capek, 2001

In the future, the above functions will be regrouped into real or virtual ones. Intermediaries exist because they provide value-adding services. IT enables the instalment of virtual intermediaries by offering most services over the net, thus bypassing physically existing ones (for examples, refer to beyoo.ch or orbiz.com). Some travel agencies, for example, might therefore very well lose a key part of their added value and thus a hefty share of the unique expertise they offer customers.
The new role of the physically and "real existing" travel agents in this open system must therefore be grounded on the basis of adapted core competencies. At present, travel agents provide customers primarily with convenience (often in connection with products of low complexity and low margins, combined with the compulsion to produce them in great quantities), while the new communication technologies such as the Internet increasingly enable customers to obtain the necessary information, and make the bookings, themselves, provided that technology advances sufficiently to preclude any recourse to the retail trade (for a distinction between service concepts, cf. Norman, 1991, among others).

Particularly in the information business "tourism", the legitimation of an adapted existence of intermediaries (Schertler, 1994; cf. Chapter 2.4.2.2) is therefore precisely based on their potential as infomediaries (= personal agents) (Hagel & Singer, 1999). Consumer time is a scarce commodity; consumers' time and patience or ability to work out the best deals are limited. In addition, vendors will save time by not needing to haggle, customer by customer. Infomediaries aggregate information with that of other consumers and use the combined market power to negotiate with vendors on their behalf. In the long run, they might even become leisure consultancies, thus integrating additional value in their consultancy work. In any case, infomediaries become community organisers in this way. The factors of attractiveness of infomediaries is shown in Table 12.

Table 12: Attractiveness of infomediaries

<table>
<thead>
<tr>
<th>Attractiveness to clients/consumers</th>
<th>Attractiveness to vendors/producers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quality of profiles</td>
<td>Quality of profiles</td>
</tr>
<tr>
<td>Number of vendor relationships</td>
<td>Number of vendor relationships</td>
</tr>
<tr>
<td>Breadth of product/service offering</td>
<td>Breadth of infomediary offering</td>
</tr>
<tr>
<td>Targeted marketing service</td>
<td>Targeted marketing service</td>
</tr>
<tr>
<td>Infomediary agent services</td>
<td>Infomediary agent services</td>
</tr>
<tr>
<td>Number of clients</td>
<td>Number of profiles</td>
</tr>
<tr>
<td>Infomediary buying power with vendors</td>
<td>Market research activities</td>
</tr>
</tbody>
</table>

Source: adapted from Hagel & Singer, 1999

From a proactive perspective, it may be argued that destinations, in particular, must be interested in close ties with infomediaries. A supplementary (and sustainable) basis of such ties may be, say, the production of extensive knowledge about the destination and access to exclusive offers; this support contributes towards their core competencies and thus enhances their competitiveness.

For retailers, in particular, closer cooperation with incoming agencies of destinations is a valuable alternative to the "classic" tour operators (in their capacity as the source countries' outgoing agencies). From the destinations' point of view, IT creates the technical foundation for comparably close ties to retailers or tour operators.
2.4.2 Success factors for on-line marketing and distribution

Based on success factors for marketing through the Web (cf. Table 13), we shall place special emphasis on selected topics of on-line marketing.

Table 13: Success factors for marketing through the Web

<table>
<thead>
<tr>
<th>Attraction (attracting users)</th>
<th>Audience creation, branding, advertising</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commitment (engaging users' interest and participation)</td>
<td>Intuitive and user-generated offer, search oriented navigation (crosstab &quot;special activity interest&quot; by &quot;geographic area&quot; by &quot;attraction&quot; by &quot;core services&quot;)</td>
</tr>
<tr>
<td>Retention (retaining users and ensuring they return)</td>
<td>Branding, dynamic offer, secure transaction facilities, online communities</td>
</tr>
<tr>
<td>Learning (learning about users' preferences)</td>
<td>Information gathering, preference learning</td>
</tr>
<tr>
<td>Relation (relating back to users to provide customised interactions)</td>
<td>Customised/ personalised communication, real-time interactions, linkages</td>
</tr>
</tbody>
</table>


2.4.2.1 The search for attraction

A key role with regard to the search for attraction, but also with regard to retention, is played by the branding of tourism products. This is especially important when it comes to site loyalty (Gretzel et al., 2000). Moreover, branding matters because of the prevailing information overload and because brands serve as a substitute for physical facilities that may help to place trust in a "real world" (Sterne, 1996). Brands will increasingly become statements about customers, an organisation’s knowledge of certain customers, and customers’ trust in the company’s ability to deliver the desired products and services. Brands will no longer be only product-based but founded on the understanding of the customer/producer relationship (Hagel, 1999). "The community becomes the brand, the product must stand on its own" (Hagel, 1997).

Another basis of the search for attraction lies in the field of promotion. Here, the application of traditional advertising models is of no use, as customers are in a forward-leaning/active and not in a backward-leaning/passive mode (Cleary, 1999). Promotion in on-line marketing therefore means enabling/empowering consumers because they are in charge/control (Schlosser & Shavitt & Kanfer, 1999; cf. Chapter 2.4.2.2 on the information gathering process).

It is also because of this that Godin (1999) introduced the concept of permission marketing, which is based on the premise that consumers' attention is a scarce commodity which needs to be managed carefully. Permission marketing provides consumers with an opportunity to volunteer to be marketed in return for some kind of
reward. Another reward lies in the fact that a consumer who is interested in certain kinds of products will be made correspondingly attentive (Laesser, 1998). Infomediaries as community organisers could play a key role with regard to permission marketing, depending on their degree of steering capacity in a given community.

2.4.2.2 Commitment on the basis of the information gathering process

We have shown earlier that tourist services are immaterial and intangible (cf. 2.4.1.1). To begin with, this manifests itself as a mere promise of a potential performance on the provider’s part (Schertler, 1994). There is no prefabricated product since the service can only be produced once provider and customers meet so that the original promise can be redeemed.

In a competitive market such as tourism, consumer awareness, selection, and choice of tourism and hospitality products depend heavily on the information made available to and used by tourists (Fodness & Murray, 1999; McIntosh & Goeldner, 1990; Moutinho, 1987). From the guests’ point of view, information is the harbinger and initial indicator of the later, actual tourist service. It follows that the quality and quantity of the information available is an actual strategic success factor (Bieger & Laesser, 2000a; Laesser, 1998).

The issue of modelling consumers’ choice processes raises two concerns with regard to the adaptation of the IT marketing of tourist services. First, the ability of e-commerce to learn about the needs of individual consumers, and second, the ability of individual tourism suppliers not to link together their websites but to integrate all of them to present a complete “virtual” tourism experience on the basis of a “travel prototype” which is appropriate to individuals’ needs (Palmer & McCole, 2000; Laesser 1998). Many tourism destination marketing groups have achieved success by representing diverse business interests through the media of exhibitions, brochures, advertising, etc. (Chetwynd, 1999). A new challenge, however, will consist in the development of cooperation in ways which are meaningful for electronic commerce through business-led strategies, thus forming technology-driven networks.

2.4.2.3 Customer Relationship Management

In the 1990s, tourism marketing appeared little different from previous decades. Although access to and the availability of new technologies such as the Internet have widened the options that are available to the tourism operators, the basic approach towards attracting customers has more or less remained the same. Mass marketing and especially the one-way promotion of products are still the state of the art in the tourism industry. Whether tour operators or travel agencies, nearly all tourism operators gather information about their customers – therefore a multitude of opportunities exist to assemble detailed information about the consumer. In fact, there are not many industries which involve such a high level of interaction (or contact) with their customers as does the tourism industry. (Oppermann, 1999).
The satisfaction of customer needs has probably never been as crucial as it is these days. The role of IT in this context therefore consists mainly in providing the opportunity for systematic database marketing which aims at customer retention, product promotion and customer creation (Oppermann, 1999):

♦ **Design and functionality of data warehouses** which aim at the potentiality of collecting customer data with regard to their perceived value; such data consist of (Pechlaner & Smeral, 2001)
  - quality expectations,
  - perceived intrinsic quality attributes,
  - perceived extrinsic quality attributes,
  - price expectations,
  - perceived monetary costs,
  - perceived non-monetary costs.

♦ **Optimal data mining** aiming at an optimal matching of customer demands and needs.

♦ Establishment of a basis for optimally designed and **customer-oriented services**.

By introducing sophisticated CRM systems, the tourism industry shall individualize the relation to the customer by (Shaw, 2001):

♦ “Measuring both inputs across all functions including marketing, sales and service costs and outputs in terms of customer revenue, profit and value.”

♦ Acquiring and continuously updating knowledge about customer needs, motivation and behaviour over the lifetime of the relationship.

♦ Applying customer knowledge to continuously improve performance through a process of learning from successes and failures.

♦ Integrating the activities of marketing, sales and service to achieve a common goal.

♦ The implementation of appropriate systems to support customer knowledge acquisition, sharing and the measurement of CRM effectiveness.

♦ Constantly flexing the balance between marketing, sales and service inputs against changing customer needs to maximize profits.”

The following goals are focussed (Bach & Österle, 2000):

♦ **Customer Retention**: The monetary effort to gain a new customer is about five to seven times higher than to retain an existing customer (Kunz, 1996). A wide basis of regular customers will bring considerable monetary advantages (in the long-run) to a company.

♦ **Customer Selection**: Vital is the share of wallet of the customer. That’s why the enterprises have to gain as much information about the customer as possible, to draw conclusions from about the long-run profitability of the customer.

♦ **Customer Acquisition**: As a general rule, the enlargement of customers is the aim of every enterprise. To do so, the migration of existing customers has to be over compensated by new customers.
♦ Increase of operational efficiency:
  • Due to the generated knowledge about the customer and due to the efficient processing of this data by CRM systems, transaction-costs and –time can be lowered.
  • CRM systems are also able to lower the manual activity (selection of addresses for mailings, postprocessing of customer calls). Thus, CRM systems have comparably cost-lowering effects as classical information systems.

As a consequence of the convergence between the industries briefly described in Chapter 2.1.3, what is increasingly emerging is a client co-ownership. Customers belong to everyone and to no one (Döring, 2000). As a consequence of unbundling, in conjunction with the trend towards disintermediation and the potentialities of IT, it may therefore be assumed that in future, a handful of CRM players will share the market among themselves (Döring, 2000; Laesser, 2001). They will
♦ address attractive customer segments in wide areas of the requirement range,
♦ cover the product/service range through partners,
♦ establish and trade in their own currencies,
♦ individualise offers and pricing on the basis of customer behaviour,
♦ use the Internet (through various access media) as an essential link with their customers,
♦ cut other companies off from access to customers,

thus explicitly donning the infomediaries' mantle. An exemplary – albeit fictitious – conglomerate from a Swiss customer's point of view is represented in Table 14.

Table 14: CRM Player

<table>
<thead>
<tr>
<th>CRM-Player C</th>
<th>CRM-Player B</th>
<th>CRM-Player A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financial Services</td>
<td>Mobile-phones</td>
<td>CD/Book</td>
</tr>
<tr>
<td>Electronics</td>
<td>CD/Suisse</td>
<td>Financial Services</td>
</tr>
<tr>
<td>Mobility</td>
<td>Credit-Suisse</td>
<td>Electrons</td>
</tr>
<tr>
<td>Food</td>
<td>The AVIS</td>
<td>The AVIS</td>
</tr>
</tbody>
</table>

© Individualised Offer
In a network, CRM will face the following challenges, in particular:

- **Offer/benefits:**
  - not only information or bonus programmes, but **individualised offers** and **community orientation** in conjunction with the creation of emotions (for instance on the basis of chat pages);
  - creation of **convenience** and **options**: optimisation of personal services through information, involvement, individual performance analysis, and convenience with the help of IT;
  - **transparency**, authentic and genuine incentives;
  - prevention of the cannibalisation of the main business and competition spiral.

- **Institutionally:**
  - responsibility/players,
  - data ownership,
  - division of costs,
  - system overlap.

### 2.5 Summary and Conclusion

Tourism as a net business is particularly affected by the potential of being able to unbundle value chains and to create offer networks that meet customer demands, and to do so not least on the basis of IT. In the future, this will be likely to lead to borders between industries being softened up even further. Owing to the disadvantages inherent in SMEs, tourism is also predestined to internalise the advantages of a net economy and to defuse the scope of these disadvantages for the future (on the basis of an exchange of know-how, the joint establishment of support processes, joint market research, etc.).

The benefit of IT in a net economy particularly consists in the possibility of defining plugs and thus a technological platform of cooperation. It is also these platforms and the related standards which cut transaction costs and thus generate a net increase in the benefit of the networks. In this way, plugs are actually a stabilising factor.

With the use of IT and its concomitant speed and cost advantages, information is becoming a strategic resource to an even greater extent than before. Within the framework of offer networks, size advantages with regard to this resource may not be equalised, but they are reduced. With regard to the marketing of specially intangible and emotional services such as predominate in tourism, the Internet, in particular, creates a technological possibility of processing and disseminating information in an individualised or group-specific fashion which will answer customers’ needs even better.

Participants in demand and supply networks will encounter each other either directly, or within the framework of portals, or on the basis of proactive work done by infomediaries, who will supersede the classic intermediaries. From a supply-side point of view, it is of vital interest to empower potential infomediaries on the basis of information and “tie” them and their communities to a given network.
3 Micro-level

3.1 Introduction

As represented in Chapter 1.2 and in the process model (cf. Table 3), the actual production of services takes place on three levels. Apart from the macro- and meso-levels explained in detail in Chapter 2, the service provision process as a whole also depends on activities which occur at a micro-level. Whereas the meso-level contains the activities along the service chain (frontstage) and supporting activities such as marketing, controlling, etc., which are not visible to customers, the micro-level at the front involves the actual core processes of the entire service provision: this is where customers come into direct contact with the service provider. For this reason, the example of this contact will be used to demonstrate how it can be optimised with the help of IT, i.e. how it can be devised to satisfy the guests’ requirements even better.

3.2 Conceptual framework: the role of personal interaction in the service production process

3.2.1 Introduction

Customer contacts determine the actual “moment of truth”, since this is where the company’s competencies and its entire service culture is, as it were, expressed by its staff. Thus the quality of the service provided hinges exclusively on the front-line staff (Bieger, 2000a; Norman, 1991). It therefore becomes clear that the personnel management of service companies must look into, and initialise, approaches to provide front-line staff with the requisite skills.

Owing to the increasingly rapid alignment of the quality of physical offers and impersonal services (i.e. services that are information-related or have been generated automatically), personal services are becoming increasingly important as an element of differentiation, particularly in tourism. The question must therefore be asked as to how the value of personal services and their long-term contribution to “share of loyalty” and to “share of wallet” can be increased (& Laesser, 2000b).

Personal services must be designed to
- create a value through the quality of social interaction itself,
- contribute to service recovery through the provider’s personality and technical competence,
- enhance customer relations through trust.
3.2.2 Personal interaction as a value-creating core competence

Owing to the uno actu character of tourist services, it is not only the value of the result of the service or product but also the value of the experience of the service of product that is of significance. Accordingly, there must also be an extended understanding of the creation of value (cf. also Wehrli & Jüttner, 1996). This, too, must be based on an actual value system in which a wide variety of independent players such as customers, co-customers, the company and the provider interact together. Within the confines of this system, personal interaction between customers and the company/provider is of central importance. This results in differentiation potentials with regard to competitors, provided these potentials

- create benefit in the sense of a service experience for customers;
- are based on skills and knowledge which have been acquired in long-term learning processes and which, in turn, are often based on explicit and implicit knowledge;
- are based on a configuration of personnel skills and technology;
- (and corresponding skills) are stable over time and have an influence that reaches beyond the product and are thus unique in the sense that they are difficult to imitate and transfer.

On this basis, actual core competencies will evolve (Prahalad & Hamel, 1990; Hamel, 1994 or von Krogh & Venzin, 1995).

Owing to the strategic relevance of personal customer contact and the imperfection of the resource market, in which interaction know-how cannot be traded, these core competencies in personal service provision are strategic resources.
3.2.3 Value basis "personal interaction"

In connection with the benefit of personal interaction, reference continues to be made to the following dimensions (Bieger & Laesser, 2000b):

- **The value of the actual social interaction per se** (cf. Lehmann, 1995; Bieger, 1997). It is assumed that people in their capacity as social beings derive a benefit from their communicative exchange with others.

- **The value of the human response to critical incidences** (Boshoff & Leong, 1998; Heskett & Sasser & Hart, 1991). Owing to the simultaneity of production and consumption, and owing to the human factor, individual glitches and deficiencies cannot be ruled out in the field of services. Empirical studies (Boshoff & Leong, 1998; Bitran & Hoech, 1992) imply that the handling of critical incidences cannot be compensated for by the image or other service experiences.

- **The trust factor for customers**. Various empirical studies (cf., among others, Schlesinger & Heskett, 1992; Stauss, 1997; Bieger & Laesser, 2001b) indicate that a personal service of high quality will also produce a high degree of willingness to repeat the purchase, thus increasing customer loyalty. Since service goods are intransparent and their purchase does not entail any transfer of ownership, they cannot be resold. The purchase of services carries great risks for the purchaser; he must bear great information and transaction costs. As a consequence, personal contact must also offer customers a benefit in the form of "assurance" (Zeithaml & Parasuraman & Berry, 1992) and also of trust.

For the consumer, the value derives from the service experience (=consumption experience); this is an **interactive relativist experience of preference** (Holbrook, 1994; Holbrook & Hirschman, 1982). This results from an actual system interdependence on the part of the players. A company's competitiveness is therefore not only determined by the quality of a single player (for instance, the boss or an employee) in this system alone, but by the system as a whole (cf. also Wehrli & Jüttner, 1996). Each of these players is simultaneously the point of departure and the point of arrival of interactions, i.e. both the **customer and the supplier of values**. At the micro-level, this results in an actual dissolution of the relationships between demand and supply. All the relationships are shaped by context factors, such as the company's formal structure, incentive systems, artefacts such as interior design, architecture, and rituals, etc. (cf. Table 15).

The ultimate benefit of these interactions may be seen as a contribution to an **extension of one's identity**, with identity being defined as the ability to perceive oneself as independent in one's relations with others (Simon & Mummendey, 1997; Baumeister, 1986; Hausser, 1995). This self-perception is regarded as the foundation of the empathy that was mentioned above, which, in turn, influences the subject-matter and the form of communication and thus the quality of the interaction (Goleman, 1995).
Table 15: Interaction model for personal services

<table>
<thead>
<tr>
<th>Business Unit Management</th>
<th>Customer</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Identity</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Artefacts</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Incentives</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Formal Structures</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Informal Structures</strong></td>
<td></td>
</tr>
</tbody>
</table>

**Source:** Bieger & Laesser, 2001b

3.2.4 Creation of the prerequisites for the value-adding core competence, "interaction"

These "benefits" depend on the employee’s own identity, on sufficient scope for response and action, and on skills and willpower. This, of course, requires a leadership logic which distances itself from the controlling assembly line philosophy, and an orientation to a model which highlights employees’ commitment and involvement. To achieve this aim, various authors postulate that employees should be granted empowerment (cf., among others, Bieger, 2000a; Stewart, 1997; Osterloh & Frost, 1996; Lehmann, 1995), with empowerment being made up of the following dimensions:

- formal dimensions, such as the delegation of competencies and responsibility;
- material competencies, such as the provision of suitable equipment and technological support;
- teaching of the necessary information skills;
- cultural basics, integration into a service culture which determines the employee’s role and the demands made on the quality of their performance (cf. also George & Grönroos, 1995);
- involvement in a shared corporate culture and value basis;
- support provided by the top management.

IT lays an essential foundation on which front-line employees can be extensively empowered in the first place.
3.3 The role of IT in creating an optimal interaction framework

To begin with, the role of IT lies in bundling, encoding and processing data in general and customer data in particular. This wealth of data, which is primarily generated and processed, with the help of adequate IT tools, at the front through the above-mentioned core processes in personal interaction, but also at the back, for instance on the basis of a customer’s payment modalities and booking habits, serves to provide a basis for comprehensive databased marketing. Databased marketing, understood as a comprehensive marketing strategy based on a memory of business transactions with customers, is a crucial step towards gaining a competitive edge (Oppermann, 1999). The core concept is "building up sufficient information or data on individual people so that you can carry out complex communication programs with them" (Fletcher & Wheeler & Wright, 1994). Databased marketing, in turn, is a pivotal prerequisite for effective and efficient CRM (cf. chapter 2.4.2.3).

With the support of IT, an actual information circuit can emerge on the meso- and micro-levels of our process model (cf. Table 16).

- In a direct interaction between provider and customers, information is exchanged frontstage (1) at the micro-level (interaction). With the help of suitable IT support, the data are collected by the front-line personnel, and placed in a knowledge database or "fed" into the Intranet, which will make them available throughout the company.

- Backstage (2), the new data are processed and linked with existing data. With the help of a suitable CRM software, this information is made available to the front-line staff in an integrated form.

- Frontstage, (3) the data that are available on-line can be used efficiently in personal interaction for the support of the core processes, thus optimising the personal service at the moment of truth.

- In the course of the interaction process, (new) information about the customer is generated once again, and then again fed into the Intranet to be made available throughout the company (i.e. in marketing, controlling, etc.) (4).
Table 16: Information circuit

Source: authors’ own illustration

In this manner, the basic demands made on an internal network, i.e. the interaction between the meso-and micro-levels (for instance, the creation of convenience) can be adequately satisfied. With an interaction between systematic databased marketing and integrated CRM, the aim of optimally matching customer demands and needs and a service designed along the lines of customer orientation can be achieved.
4 Conclusion

The net economy and the penetration of IT into all areas of life creates better general conditions and thus the potential for the improvement of a company’s own profitability, particularly also for SMEs in tourism. The paradigmatic change "away from hierarchies and structures in the direction of networks" preconditions the way in which we will do business in tourism in the future. The aim of networks in this field, not least with the support of IT, is to generate values

♦ either on the supply side, which will cut costs ("stretch"),
♦ or on the demand side, thus skimming off the willingness to pay ("fit").

The report shows, that IT is not only one of the key drivers with regard to the potentiality and facility of business networking, but also an enabler what concerns the facilitating of productivity (not necessarily by direct means but more by indirect means on the base of business networking). The rise in productivity is based on the IT-based partial egalization of SME-disadvantages. The impact of IT-supported business networking results in the

♦ improvement of economies of scope;
♦ egalization of the advantages of larger enterprises with regard to their leading position with regard knowhow and information;
♦ decrease of transaction costs and therefore in the increase of SME’s affinity to participate in (cooperative) networks;
♦ reduction of the size equally of the optimal business unit and the enterprise.

Besides of that, IT as facilitator can play a key role with regard to several dimensions and foci.

Table 17 shows examples of practical operational alternatives of IT. Hereby, one can differ between:

♦ **directional measures** of flow of data: from outside in (from market to supplier) to inside out (from supplier to market), with a mutual dimension
♦ **level of aggregation** of (flow of) data: from operational level to network level

The key role of business plugs is being taken into account on the network level.
<table>
<thead>
<tr>
<th>Level of Aggregation</th>
<th>Network Level</th>
<th>Business Unit Level</th>
<th>Operational Level</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>♦ (Automated) Environment Data Collection and Analysis Systems</td>
<td>♦ Branch Data Collection and Analysis Systems: Branch oriented automated compilation and analysis of data</td>
<td>♦ Customer Front Care System: Information on customer's behaviour and knowledge on demand (content and structure)</td>
</tr>
<tr>
<td></td>
<td>♦ (Automated) Market Data Collection and Analysis Systems (Segmentation)</td>
<td>♦ Business Plugs</td>
<td>♦ Integrative Transaction Systems: Inclusion of pre-, current-, and post-POS (Point of service transaction) facilities and potentialities for transactions</td>
</tr>
<tr>
<td></td>
<td>♦ Management of Demand driven technical Networks: Systems and Plugs apart from key tourism elements (cf. „Palm“, Mobile Phones, etc.)</td>
<td>♦ Project Management Systems: Supporting technologically the network-driven complex project management structure</td>
<td>♦ Workflow Management Systems</td>
</tr>
<tr>
<td></td>
<td>♦ Customer Tracking Systems: similar to large shopping malls etc. Basis for planning of additional infrastructure and services.</td>
<td>♦ Business Performance Analysis Systems: Financial on a business unit level (cf. Hotel Analyser, inclusion of planning instruments such as business and financial plan); non financial with regard to the operational level (productivity indexes)</td>
<td>♦ Information and Ordering Systems on Service and Transaction Details: cf. Restaurant Menu Information</td>
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<td></td>
<td>♦ Business Plugs</td>
<td>♦ IT-related Business Unit Information and Reservation Systems; cf. Hotel and Restaurant Information and Reservation Systems</td>
<td>♦ IT-related Destination (i.e. Network) Information and Reservation Systems</td>
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<td>♦ Benchmarking Systems: according to level; financial with regard to business unit level; non financial with regard to operational level. This is primarily a service of the network to the business unit partners.</td>
<td>♦ Service Recovery Supporting Systems: cf. automated scripts, behaviour regulation, automated support with regard to „if-then-else“ guided service recovery process</td>
<td>♦ GNS Hookup</td>
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<td>♦ Yield Management Systems: Support of capacity planning (process) for the business unit partners, maximizing customers willingness to pay in a given network, at the base of network specific segments (predefined). This is primarily a service of the network to the business unit partners.</td>
<td>♦ IT-related Travel Prototyping Facilities: Basis of enablement of individuals and communities to minimize unwanted risks and maximize their knowledge about what they are about to buy</td>
<td>♦ Individualized/ grouped supply and offering systems: Taking the key role of communities into account</td>
</tr>
<tr>
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<td>♦ IT-related Destination (i.e. Network) Information and Reservation Systems</td>
<td>♦ IT-related Business Unit Information and Reservation Systems; cf. Hotel and Restaurant Information and Reservation Systems</td>
<td>♦ IT-related Travel Prototyping Facilities: Basis of enablement of individuals and communities to minimize unwanted risks and maximize their knowledge about what they are about to buy</td>
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</table>

Outside in  Inside in/ Mutual  Inside Out

Directional Measures
Value in that system is created by manifold means:

♦ **Novelty**, based on
  - the creation of new transaction channels, structures, and means (own currencies);
  - the convergence between tourism and other industries (cf. health, education, media, communication, etc.)
  - the increased potential for effective and efficient community marketing
  - introduction of new and customer-oriented means of marketing (cf. permissive marketing)

♦ **Lock-In** (and stabilisation), based on
  - Introduction of business plugs
  - technologically induced/based trust on the supply-side
  - creation of new economies of scale and scope for SMEs
  - CRM-affiliated measures on the demand side

♦ **Complementarities**, based on
  - convergence of industries, incl. tourism (see above)
  - customer co-ownership
  - the unlimited potential of customizing/individualizing bundles of products,
  - the combination of singular technologies (cf. combination of Internet and Mobile Phoning)

♦ **Efficiency**, based on
  - the reduction of transactional costs by optimizing any interactional framework
  - network based cost reduction on the backstage levels of the business units
  - adaption of intermediary stages (transformation to infomediaries)
  - simplicity (resulting in the gain of speed),
  - newly created „virtual“ economies of scale and scope
  - potentialities of clearing perishable good such as „service“
  - the IT-induced reduction of search costs
  - adapted (cost minimizing, value maximizing) input of resources (men and technology), including extensive forms of empowerment
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