

The Role of an Information Concept in Relation to Destination Management

Christian P. Schucan

Institute for Information Systems
Swiss Federal Institute of Technology (ETH)
ETH-Zentrum, CH-8092 Zurich, Switzerland.
Email: schucan@inf.ethz.ch

Abstract

Tourism has become an extremely dynamic system. Introduction of flexible structures, fast changing customer behaviour, strong impacts from the development of transportation and information technologies influence the industry. In this paper we distinguish between two main spheres of influence, i.e. the technological sphere and the economical sphere. In each sphere we focus on a concept, which addresses some of the most important issues arising in the respective sphere. Technological issues are addressed by information concepts. Economical issues are addressed by the destination management approach.

In this contribution we want to show the value of developing information concepts for tourist organisations and point out the relationship between the destination management approach and our information concept approach. Related aspects of business engineering, virtual organisations and strategic information management are investigated. Finally practical experiences from two case studies are compared to this theoretical conclusions. We conclude that information concepts and the destination management approach enhance each other in an optimal way.

1 Characteristics of information concepts

1.1 Chapter overview

We first introduce the appropriate notion in order to show the value of information concepts in tourism. This is done by describing the purpose of an information concept and the results captured in the concept. Furthermore the characteristics of the process of developing an information concept as well as the main issues handled by our information concept methodology are described. The relationship between the information concept methodology and potential application areas is analysed.

1.2 The notion information concept

The notion *information concept* was already introduced in [1] and defined as: *strategy for the development of the most important databases and dataflows of an enterprise including the respective responsibilities and data acquisition channels*. This definition is strongly coupled to the development of information systems. In particular it is not obvious, how information is used as an enabling factor for the success of the business. A tighter link between business strategy and information concept is needed. Therefore [2] investigates a broader understanding of the interaction between information management and business strategy. It is shown, that business strategy and information strategy should be defined together. That is why the notion *information*

concept is extended as described in [3]. Referring to this definition an information concept can be outlined as follows: The general purpose of an information concept is to optimally link the dimensions business strategy, organisation, processes and information technology from an information perspective. Optimal means effectively and efficiently fulfilling the goals of the different interested parties in an enterprise. Consequently all factors relevant to the business itself have to be investigated in relation to the relevant information aspects to achieve the desired inter-relationship between information and business. Especially the different goals of the interested parties in the enterprise have to be taken into consideration. This allows to develop an information concept comprising the definition of information acquisition, processing and presentation within an enterprise. It points out which new business opportunities can be realised, enabled by a changed and improved information processing or enabled by the use of new information technologies.

1.3 Results captured in an information concept and characteristics of the design process

We invented a methodology for the development and design of information concepts. The methodology *integrates* the following methods and techniques in order to achieve conceptual integrity of the involved components: system dynamics approach [4, 5], developing business strategies [6], entity-relationship approach and structured system analysis and design method [7, 8]. Four main modules are distinguished (see fig. 1.):

- *virtual organisation (VO)*: containing the business goal with its main products (and by that implicitly the core processes) and their information aspect, the generation path of management information (important for future decision support systems), the core competences and their empowerment by educational, knowledge and information system support and finally the employee roles bundling the related core competences. The related bundling of the empowering support measures yields the information strategy on the operational level.
- *real organisation (RO)*: containing the organisational and the process structure on which the VO has to be mapped. Different mapping strategies are possible, from complete reorganisation to continuous mapping. The reorganisation approach usually yields a more efficient but less flexible structure whereas continuous mapping yields a flexible structure with need for more coordination.
- *information sources for the development of the information concept (IS)*: containing existing strategies, concepts and documentation.
- *core information concept (CIC)*: containing the appropriate information needs and information support captured in the portfolio of strategic information systems. The support of these information systems by information technology is captured in the portfolio of strategic information technologies. These portfolios represent the ideal goal which is achieved by a (small) number of strategic projects, captured in another portfolio, in the portfolio of strategic projects. The modules VO, RO and IS provide the basic structures needed for the definition of the CIC. For instance is the use of communication and workflow technology determined, depending on the complexity of the organisation and on the degree of structure of the core processes.

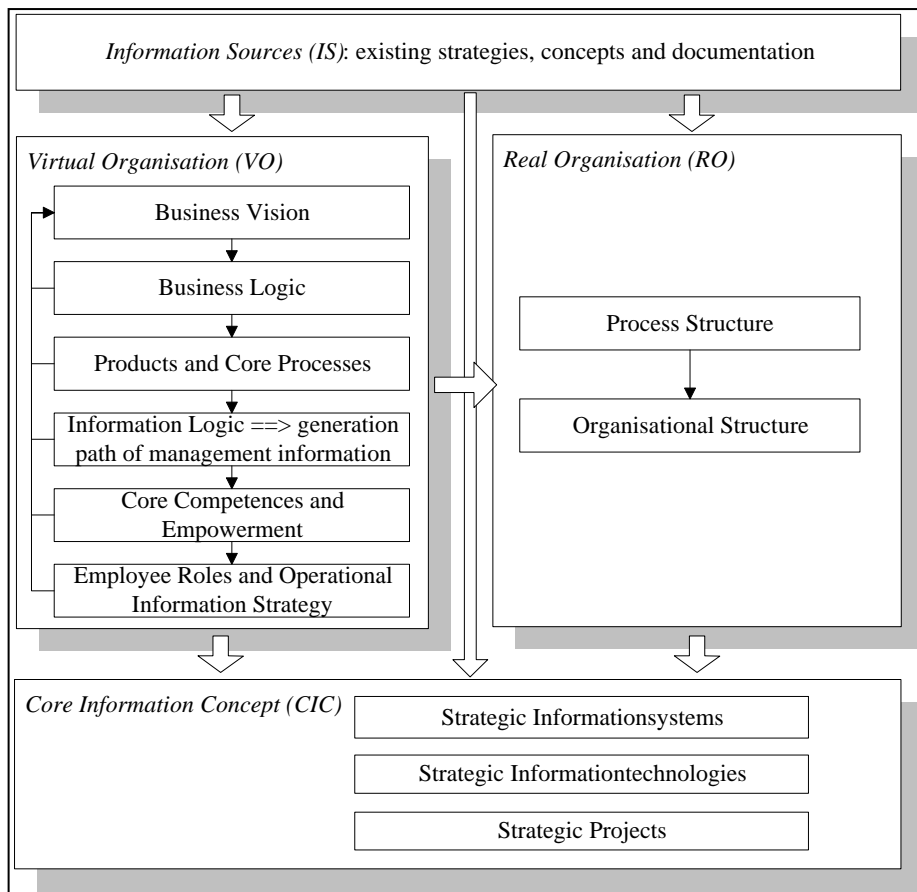


Fig. 1. Information Concept Methodology

The process generating the above mentioned results is an iterative process, allowing the fine tuning of the different results. Workshop techniques are intensely used to set the strategic priorities and to take into consideration the goals of the different interested parties in the enterprise. Business and information technology issues are put in relation to each other by the consistent methodology from the business level down to the technology level.

1.4 Potential application areas of the information concept methodology

Strategic information management and Business Engineering

The main application area of the information concept methodology obviously is the strategic information management, because both the information strategy and the support of the information strategy are fixed in the concept. The information strategy includes as already discussed the information, the internal information flows within the enterprise and the external information flows with providers and customers. The sup-

port includes the use of information technology in order to enable these information flows and the organisation establishing these flows and the respective technology.

The information concept methodology can be seen as *business engineering* methodology. State of the art methodologies focus on modelling processes of an enterprise [9]. Therefore workflow management software plays a dominant role in the field. A more general method is provided by the information concept approach, which includes the process-organisation level as well as the management level. The integration of this two aspects is important in order to establish an optimal information flow from the operational to the management level and vice versa. The information concept methodology additionally guarantees the match with the business strategy. The business engineering approach derives from the business process re-engineering approach introduced in [10]. The approach represents the idea of first conceptually re-inventing the enterprise from scratch. The use of information technology and therefore information management plays a major role, enabling new organisational concepts. The information concept methodology incorporates these properties.

Virtual Organisations

The module VO in our methodology implies a relationship between the information concept and the concept of virtual organisations. In fact the design of a virtual organisation can be done using the information concept methodology. To show this, the properties of virtual organisations are investigated and compared in the following with the information concept approach:

The notion of a virtual organisation (or equally corporation) first appeared in [11]. A more profound introduction was given with [12]. One of the most recent and an easy readable publications is [13]. Our understanding of virtual organisation has its roots in these publications. In [13] we find the following definition of a virtual company: *a virtual company is a combination of resources from different places assembled and managed so as to behave like a real company*. The core properties of a virtual organisation are:

- Clear defined business strategy – the common goal
- Reuse of existing core competences of the different partners
- Customer focused process organisation
- Link of partners and resources to the corporation as if they were part of it
- Flexible communication infrastructure with standardised interfaces (e.g. extranets)
- Common information base, information broker.

It is important to notice, that a company can participate in more than one virtual organisation. Additionally the company can produce and sell their own products in a traditional manner. The concept of the virtual organisation can be seen as a further development of the business (re-)engineering approach, because the customer focused process organisation is an important factor in order to react flexible to fast developing market needs. This basic organisation is enhanced by cooperations with other companies in order to optimally produce new products without establishing a whole new

company (i.e. introducing new production, marketing and management facilities). The result is an improved time to market.

Coordination and communication facilities play a major role, because of the renunciation to a centralised management. Therefore an accurate information strategy is crucial, e.g. the participating companies need to know which operational information has to be exchanged to optimally coordinate their existing processes. They want to know, whether the virtual company is successful or not, if decisions have to be made etc. Therefore management information is needed to assure that.

The presented results and characteristics of the information concept methodology fit these needs. As already mentioned business strategy, information strategy (operational and management), core competences and information technology are included in the information concept. The relation between business engineering and the information concept approach was already mentioned. Such a virtual organisation is implemented in real organisation by continuous mapping of the core competences onto the different companies involved. Reorganisation efforts are needed for those companies working without a process oriented organisation. This combination of mapping and reorganising is much more complex than just reorganising one company. Details concerning the single company have to be abstracted and handled in restricted concepts for the respective company. This abstraction is different from developing an information concept for a single company.

2 Characteristics of destination management

2.1 Chapter overview

In this chapter we discuss one of the present developments in tourism industry: the introduction of the destination management approach as it is being established in several regions of Switzerland. Based on the causes which led to this development, we explain the principal elements of destination management and derive some open issues. These open issues are enhanced by questions and characteristics resulting from a comparison of the destination management approach with business engineering and virtual organisations. We conclude that many issues known in the business engineering field can be adopted for destination management. This also implies that business engineering methodologies can be adopted for introducing destination management. We also conclude that introducing a destination management approach can be seen as an excellent example of introducing a virtual organisation.

2.2 Causes and principal elements of destination management

For a long time tourism industry has been a growing industry with its main centre in Europe and in the USA. The globalisation enabled by technology development and by that less expensive travel costs increased competition. Tourists disposed of more and more spare time. Therefore pure recreation was no longer just the only goal of travelling. Self-realisation by attending different attractions also became an important goal for tourists. Marketing activities and customer focus became more important. It became hard to develop *effective* marketing activities at costs affordable for small organisations. The reason for this development were the intensified marketing efforts of

all tourism organisations. Innovative products had to be developed. For these reasons a more effective approach had to be found – the destination management approach.

The definition of the notion of a destination changes depending on the author. In [14] different definitions are assembled resulting in the following definition: *A destination is a space (city, region, major hotel), which is chosen by the guest as the goal of his travel. The destination includes all facilities necessary for accommodation, catering and entertainment/occupation.* In this definition a destination is defined by the tourist. This concrete definition depends on his specific needs and his perception. This view of a destination would result in a not manageable number of destinations or disappointed guests if not handled accurately.

Another definition, given in [15] is comparable: *A destination is a location with a pattern of attractions, related tourism facilities and services, which the tourist or a group chooses for a visitation and which the service provider markets.* In this second definition the service provider's point of view is added. Common properties of destinations are (based on the above definitions):

- A destination is defined by the guest
- A destination needs a significant size for effectiveness-reasons concerning marketing efforts
- The offered product of a destination contains a multioptional product, out of which the guest selects the services according to his needs
- A destination is a corporation made up by different autonomous companies. A service usually is provided decentralised and by different service providers.
- Destinations differ from each other by size (expressed for instance by the number of overnight stays), geographical area and structure, and related tourism attractions.

According to [14] the destination management organisation is responsible to coordinate these properties by looking after the following main functions: strategy and planning, representation of interests, product-offering (coordination and general/public services), and marketing.

The range of effectiveness of marketing efforts depends upon the characteristics of a specific destination. Big destinations have a wider range than small destinations. Small destinations can coordinate the different services faster and more in detail than big destinations. Therefore a multilevel organisation of these destinations is needed.

2.3 Open issues of the destination management approach and comparison with business engineering and virtual organisations

Information is a central issue in tourism. On one hand there are information services used by tourists, e.g. tourist information offices, internet sites, brochures etc. On the other hand developing and providing multioptional products needs coordination. Coordination is nothing else than exchanging information. An optimal knowledge base and information transfer is crucial for the successful representation of interests. Information management is mostly done ad hoc or only for specific issues in detail. *A grand view is missing.*

A *useful set of indicators* building the base for management information is missing (see also [14]). The destination management approach needs this information in order to develop strategies and carrying out planning functions.

The concept of multilevel organisations needs a well organised definition of *coordination and information responsibilities*. This has to be specifically defined for every multilevel organisation because of the different destination structures.

Implementing the destination management approach can be interpreted *as a specific form of business engineering* (see also section 1.4): both approaches have the goal of introducing customer focus and a process organisation. Introducing the new organisation might result in a complete reorganisation. Information technology plays a major role. *Methodologies* helpful for developing and introducing the new structures are well known in the field of business engineering. We did not find something similar within the destination management approach. Because of the relation of the two approaches the use of business engineering methodologies could be helpful.

Comparing the destination management approach with virtual organisation (see also section 1.4) let us conclude, that *introducing a destination management organisation can be seen as an excellent example of introducing a virtual organisation*: a destination has a natural common goal: to effectively and efficiently market the tourism products and services. Destinations have to react to fast changing customer needs. The role of time to market of new attractions and services is rapidly growing. The natural structure of a destination made of up by different companies and reuse of existing core competences and products of the diverse partners match exactly the properties of a virtual organisation. We already mentioned the extraordinary role of coordination in the destination management approach. All these elements explained in the previous section match the core properties of a virtual organisation explained in section 1.4.

3 Theoretical conclusions and practical valuation based on two case studies

In the third step we focus on analysing the profit of developing information concepts for tourist organisations in addition to the introduction of the destination management approach. Therefore we investigate the potential match of results and characteristics of an information concept with the open issues of the destination management concept. Finally we compare these theoretical considerations with practical experiences gained from developing information concepts for two tourist boards. The process experienced as well as the results thereof, captured in the information concept, are described. The impact on the strategic use of different information technologies (e.g. Internet, database marketing and decision support systems) is discussed. In addition to this results we explain the lessons learned whilst developing the information concepts.

3.1 Theoretical conclusions

In section 2.3 we mentioned the missing grand view concerning information and information management within the destination management approach. This problem is part of defining the strategic information management for an enterprise as explained in section 1.4 using the information concept methodology. The results from

carrying out the information concept methodology tell which information and information flows are needed in a destination. How an organisation gets to the defined goal is captured in the project portfolio.

Another reason why information concepts are a valuable tool when introducing the destination management approach is given by the comparison of destination management with business engineering. We mentioned, that the information concept methodology can also be seen as business engineering method. The approach of also analysing the management information yields the specific indicators needed to manage a destination. These indicators work better than only using the number of overnight stays, because they are directly derived from the concrete business strategy.

We already stated that a destination management organisation can be seen as virtual organisation. Therefore we add the following properties explained in section 1.4 to the known properties of a destination management organisation:

- links between the autonomous corporations of a destination have to be established as if they were company internal
- A flexible communication infrastructure with standardised interfaces has to be established
- A common information base has to be developed
- The main role of the destination management organisation is the role of an information broker

The role of an information concept for a destination management company is therefore the following:

- Definition of the information strategy including coordination structures
- Definition of the process and organisational structures (at least on the level of the virtual organisation)
- Definition of the strategic information technologies

3.2 Practical Valuation

Two case studies were initiated in order to evaluate our methodology and the above conclusions. It is only possible to show some of the most important results of the developed information concepts. Both case studies are located in Swiss tourism industry. One information concept refers to a local tourist board of a major destination. The other information concept refers to a regional tourist board. Both information concepts were developed with success.

Both organisations defined the function of an information broker as central in order to fulfil the four main functions of a destination management organisation. The developed business strategy differs remarkably. They conform to the results stated in [14]. The regional tourist board sets its focus on tourism consulting projects and marketing services. Linking element between both functions is a special information management organisation. Other functions should be outsourced. The tourist board of the destination sets its focus on guest relations, event-marketing and public relations.

The information management function is distributed over the three main organisational units.

A prominent role for both organisations plays *management information*. The number of overnight stays as central indicator in tourism industry was criticised as volume oriented. This does not match the strategy of quality oriented tourism. A new set of indicators was developed. The sets are not equal, but have matching indicators. As an example of common indicators might serve: 'earnings related to tourism in the whole destination' and 'number of complaints'. A management information system based on decision support system technology deployed on the intranet belongs to the *strategic information systems*. It is important to notice, that the information needed to generate these indicators is only available if cooperations based on the destination management approach are established.

The Internet becomes a strategic communication facility because of its flexibility. In order to build a common information base this communication infrastructure is crucial. Between the guest and a tourist board the internet is used for general (marketing) information and reservations. Efforts are initialised within the destination to build extranets. These are needed to automate standardised information exchanges. Within the single tourist board simple intranet functionality is already available.

The common information base should contain marketing and relationship information: In order to be more effective direct marketing strategies are evaluated. An important tool to implement such a strategy is a marketing database containing information about the behaviour and needs of the guests. In order to optimally play the coordinating role between the different players (guests, service providers, etc.) relationship management is important to obtain the necessary information. Of special interest is for instance information about the core competences of a service provider.

The processes found showed to be poorly structured. Consequence of this fact is, that workflow management technology would not generate sufficient benefits.

The methodology improved the feeling for the importance of information in the tourism industry. Market research is only poorly developed. It is practically not possible to gather the information needed for generating the indicators without the cooperations established by the destination management approach.

4 Summary and acknowledgements

We described the properties of information concepts and their possible application areas, i.e. strategic information management, business engineering and virtual organisations. These application areas match with some of the properties of destination management. Specially we derived that destination management organisation can be seen as virtual organisation. This implies a major role for information and communication technology (e.g. Internet) for destination management organisations. We conclude that the information concept approach and destination management approach enhance each other in an optimal way: the destination management approach helps defining a useful strategy, the information concept helps to implement this strategy. We observe that information concepts are

specially valuable because of the extraordinary role of information and information technologies in virtual organisations and therefore in destination management.

Two case studies showed that developing an information concept for a tourist board organisation is a hard but valuable approach addressing a rich set of problems encountered in the two organisations.

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