Journal of Internet Banking and Commerce

An open access Internet journal (http://www.arraydev.com/commerce/jibc/)

Journal of Internet Banking and Commerce, December 2009, vol. 14, no.3
(*http://www.arraydev.com/commerce/jibc/*)

Future Multiorganisation of e-Treatment and Spa Tourism Development Aided by IT

Bernard F. Kubiak and Antoni Korowicki
University of Gdańsk, Poland

Abstract

The article discusses process reengineering in spa tourism, aided by IT applications and multimedia information interactive systems. The authors present determinants of IT use in reengineering and the necessity to move forward from the value chain to the value network due to the global development of digital economy. The study presents conceptions of setting up consortia that form information integration network systems with the availability of resources needed to provide spa tourism services. Moreover, the paper discusses the conception of multiorganisation of future in the field of spa tourism and virtual treatment.

Keywords: e-treatment, spa tourism, IT

INTRODUCTION

Contemporary spa tourism cannot function efficiently in the competitive environment and satisfy diverse needs of health resort visitors whose preferences change in time and space, unless up-to-date, integrated, network information systems of a national and global (international) coverage exist. Contrary to other business functions – spa tourism, when achieving its mission, objectives and tasks, needs to use not only its own resources, but those of co-operating business sectors first of all. Therefore, it is necessary to provide the real-time availability of business partners from all these sectors, of resources and data defining their status, quality and occurrence. Thus, the skill to integrate resources and

information intended to constitute the contents of message transfer in the course of treatment is most important in spa tourism. Setting up and operating multimedia databases, where both text and image are accompanied by sound, make it much easier to implement the idea of integration.

In practice, data characterising resources of spa organisations and of other organisations that provide services to health resort patients are much dispersed and their availability is much limited. This causes incomplete and often inadequate use of data and in consequence – slows the spa tourism development down. It is possible to change this situation for the better through setting up groups of shared interest and virtual organisations co-operating within the network. Simultaneously, the value chain which usually integrates one organisation, is replaced with the value network integrating all partners participating in services provided to the health resort patient (external integration). By these means, new business relations are created and the global network, as a manifestation of the most up-to-date information infrastructure, known also as the information superhighway, changes the functioning of not only spa organisations, but of the health resort patients as well.

INFORMATION TECHNOLOGY AND DIGITAL ECONOMY AS THE CRITICAL SUCCESS FACTORS OF PROCESS REENGINEERING IN SPA TOURISM AND E-TREATMENT

Global and local network information systems of resource reservation, the Internet, the Intranet and EDI-based electronic markets are effective and proven tools of improving the use of resources in spa tourism in the Western countries. The development of these tools combined with GIS is conducive to the competitive growth of Polish health resorts that are more and more often visited by both Polish and foreign tourists as well. Further development of the Polish spa tourism will also depend on promoting conditions favourable to resources expansion and to more effective use of these. But to achieve these objectives one needs to reengineer the existing spa processes and to introduce the **digital economy** on a much greater scale and the latter is determined by the efficient use of IT in an integrated form.

The Polish spa tourism organisations' need to achieve the competitive advantage and the necessity to enhance the competitiveness of the Polish products of this type on the national market and on international markets as well requires one to formulate in co-operation with international experts a strategy for the Polish spa tourism development. This would be the first implementation of reengineering in this business sector after its nature changed from social to the market one. Nevertheless, further transformation is an imperative and it applies not as much to the ownership and organisation structure, as to implementing new methods of tourism organisation and patient service functioning. No reengineering will have any chance for success in the Polish spa tourism however, even if interrelated closely with the development strategy implementation, unless digital economy IT solutions are commonly applied in an integrated manner. Meeting this condition is a determinant of a prompt and proper patient service, efficient response to patients' changing needs and providing friendly solutions for this infrastructure

operation.

REENGINEERING IN PATIENTS' NEEDS AND EXPECTATIONS MEETING

Process reengineering and IT implementation in tourist organisations involves deep (but not mass) and continuous (instead of one-off) changes. This applies mainly to changes in the nature, methods of functioning and activity of these organisations, changes within the existing organisational structures and style of management and in consequence – to improvement of their functioning efficiency and effectiveness, this improvement leading to achievement of the most important objective – ensuring patients' added value and satisfaction.

It is most difficult to answer the question, how and where IT should be used in spa tourism organisation. So far, no model has been developed, the use of which would enable one to give a satisfactory explanation, how IT resources should be organised and used in this organisation – should it be centralised or not – and how dispersed IT equipment should be maintained and used. The questions, where IT should be used, in which area of this organisation's activity and to what strategy it should apply, give rise to less doubt.

The experience shows that one should be looking for answers to such questions in the economy area of the spa tourist organisation. IT creates opportunities to improve the productivity, but it does not identify the area of organisation's activity where such opportunities exist. Moreover, IT enables one to design new spa tourism products and information about the organisation's activity, but it does not define the meaning of these new elements. Finally, IT makes it possible to use diverse methods of organising and running the business of spa tourist organisations, but it does not settle the issue of choosing the best solutions. Hence, the point is to develop a strategy for spa organisations which includes designing and implementing an information system to cover the information-related needs of management, and not only keeping records and accounts. Phone, fax, e-mail and other media provide efficient communication for the organisation, but if they supply useless or undesired information, then making the infrastructure more efficient leads to reduced productivity and to adverse effects. For many organisations, identification of IT applications and of benefits it brings to particular business functions is a starting point to overcome the problem. This level of IT use is called level one of IT application. At this level, the use of IT is not related to spa organisations' strategy of activity and development, nor to their strategic context. Therefore, IT implementation is moderately successful at this level. Most tourist business organisations in Poland are still at this stage of IT implementation.

The situation changes radically, when spa tourist organisations shift to the **integrated application of IT resources** throughout the organisation or even the entire business sector, i.e. to the second level of IT application. Using the existing and future convenience resulting from IT application, the spa organisation and the spa tourism sector may benefit additionally in various groups of basic and supporting activities (Porter M. E., 1985). Various units and functions of the organisation and of the entire sector make their information resources available one to another and this leads to increased scope and effectiveness of their co-operation in consequence. In effect, **IT becomes an integral part of** the entire organisation's **operational strategy**. But the process of formulating the strategy requires commitment from all management functions

and levels and the organisation's top management in particular.

As a rule, the overall strategy which is a combination of organisation's operational strategy and its IT strategy, requires implementation of new computer systems and introduction of deep changes in methods that have been used to meet clients' needs so far. At this stage of IT applications, the top management begins to play the leading role in successful implementation of these. The lack of such support and understanding of the idea of using IT from the part of the top management is the most frequent cause of the low productivity of outlays on IT. The productivity increases much, when the organisation replaces single, incoherent IT applications with a comprehensive application throughout the whole spa business. The undertaking is not easy, as IT specialist keep showing incomplete and sometimes even incorrect understanding of spa tourism objectives and specific requirements. Therefore, one can not expect that IT professionals demonstrate full understanding of the spa tourism business functioning and provide detailed guidelines, how these organisations might or should operate, i.e. definite solutions concerning the purpose and the place of using computers in the organisation. These dilemmas need to be settled by the organisation's top management. On the other hand however, it is hardly conceivable that any organisation's top management describes the business in a manner entirely comprehensible for IT professionals. It is also doubtful that the organisation's top management will fully understand and become familiar with the development of computer systems and IT. Nevertheless, this does not excuse the management from the necessity to shift to the integrated use of IT, if the organisation is expected to achieve a competitive advantage. This requires continuous growth of the top management's awareness in the area of IT applications purpose and better understanding of organisation's business from the prat of IT professionals, i.e. the culture gap between these two groups of personnel has to be reduced. This is possible through continuing education of both groups referred to, with participation of IT outstanding specialists (external consultants).

REENGINEERING AND ITS STAGES IN SPA TOURISM

Reengineering consists in identifying the processes in an organisation or a sector, eliminating those processes and activities that do not add value, orienting each of the processes towards client satisfaction, reducing the product development cycle and assuring total quality. (Hamel G., Prahalad C. K., 1999). Reengineering forces also the top management to change their views and assumptions determining the decision which markets should be served and how organisation's intellectual (personnel) and information resources should be used best. Process and workflow reengineering is mostly effected with participation of organisation's own staff instead of external experts and it includes such elements as defining the foundations and the assumptions of organisation's strategy, formulating the principles of reengineering as a basis for implementation of organisation's strategy, with identification, modelling and running the processes, as well as analysing the consistency of reconstructed processes. Reengineering can not pass over technology rearming (automate or not?), redesigning the style of work in organisation or the need to develop infrastructure for the process reengineering program.

Restructuring (organisation decreasing by employment and portfolio reduction) and

reengineering make the company smaller, better and faster. Less frequently these changes lead to any strategy reform and its entire redefinition in the field of selling channels, production processes, clients, rules of management staff promotion, success critical factors, etc.

DETERMINANTS OF IT APPLICATION FOR REENGINEERING AND DIGITAL ECONOMY IN SPA TOURISM AND E-TREATMENT

Innovative methods of using IT and also potential alternatives of new IT strategies can only be achieved with significant changes in spa tourism and in the conditions of long-term investing, which ensures combination of suitable IT applications and thorough reengineering of business processes in this sector of tourism. As the international practice shows, the success of these undertakings depends on radical and deep reorganisation of spa tourist organisations, on the way how resources (natural and anthropogenic) are used and on prosumer service. Spa tourist organisations which gained some experience in IT application, are well ahead of their competitors who are now making attempts to develop new strategies with the use of IT. If one fails to do so, this will not be conducive to organisation's future development. This is why the knowledge of IT impact on spa tourist organisation's competitiveness and initiating new projects of its application at the right time and place is so important, beside the skill of creating new products and activity areas.

This applies mainly to the lower management level, as most spa tourist organisations in Poland are still at the first level of IT application, i.e. in the phase of unintegrated (isolated) IT applications. The fact that this phase takes too long in so many spa resorts is caused by the fact that organisations' top management underestimate how IT can improve their functioning and also by inaccurate definition of objectives for IT in these improvements, mainly as a result of misunderstanding its idea and purpose.

The top management's insufficient knowledge of the essence and the role of IT in the spa tourism is the most frequent cause of inability to formulate a coherent strategy of organisation's development and of its IT strategy. Other important causes making it difficult to formulate the common strategy include the following facts:

1. top management do not know critical success factors (change management, HR management and technology management), in particular – the information needed to run the business in a competitive manner;
2. information systems existing in spa tourist organisations do not meet management information needs;
3. no IT implementation priorities exist within information subsystems.

It is spa organisations' top management who is responsible for solving these problems. But the lowest management level and other employees participate in analysing and solving specific problems of spa tourist organisation by means of IT too. This is why, both the top management and the whole other personnel of spa

organisations should be the subject of continuous IT training. This will ensure closing the culture gap between the management and other of IT users at one end and IT professionals at the other. The fact of acquiring knowledge of IT usefulness and usage in business does not guarantee that one changes his or her many years' habits originating from various work culture, but it is a proven method of changing the awareness in an evolutionary manner and identifying the degree of top management's commitment to development of IT application in spa tourism.

ORGANISATIONAL STRATEGY AND IS/IT STRATEGY VERSUS REENGINEERING PROCESSES AND THE SPA TOURISM AND E-TREATMENT

For the organisations to create the future, not only their processes need to be reengineered, but the entire business sector as well, i.e. the organisations and their basic strategies have to be redefined (Hamel G., Prahalad C. K., 1999). Both the organisation and the sector should work out a unique method of perceiving the future, which goes 5 – 10 years ahead of typical strategic plans. It is also important to imagine a future which is better than the one perceived by the competition. This vision covers one's own products and services and also those of the entire sector that have not come into existence yet. Another challenge is to create these products and services and develop an entirely new competitive space. This means, that the future belongs to those organisations that have gained the skill to create new products and activity areas, retaining the existing effectiveness criteria (cost, quality, time of product and service realisation) instead of the sole process reengineering ability, which has already been recognized as a method of improving the today's performance, but not that of tomorrow.

Identifying, what is needed to create fundamental changes in the spa tourism sector, to the advantage of both clients and companies functioning within it, is the most important problem to be solved by individual organisations and by the entire sector as well. Besides, it has not been settled, what is needed for the team of leaders to create a long-term, credible vision of the future and to realize it in accordance with the potential clients' expectations. The experience of high-developed countries (Japan, USA, Germany and others) proves that the point is to develop markets and business sectors of the future through creating new forms of competitive and quality-related advantage, through radical changes of the operating rules and of process realisation methods.

As far as individual organisations are concerned, they need to:

1. change the rule of involvement (e.g. diversification) in a well-established sector;
2. change the existing borders between business sectors;
3. create a new sector for their business or redefine the existing one.

Understanding the future of the business and creating a pro-active transformation program requires a vision of the business sector transformation process and answers to the following questions (Hamel G., Prahalad C. K., 1999):

1. what should be the image of the sector in the next 5-10 years?;

2. what activities should be undertaken for the „business of tomorrow" achieve the highest benefits?;
3. what skills and what competitive characteristics should be developed in the sector right now, in order to achieve leadership in the future?
4. what company organisational structure will enable it to take advantage of market opportunities in the future?.

It is impossible to implement a pro-active transformation program in the organisation and the entire spa tourism sector without an integrated application of modern IT. Therefore, management participation in creating IT applications in business grows systematically, as integration progresses in spa tourist organisations and in their co-operation with suppliers of resources and recipients of spa tourist product (agents and end clients). Global use of IT is becoming inescapable and it has a significant effect on the work (e.g. on selling air tickets, booking hotel accommodation, places in restaurants and other resources), on the organisational structure, internal interfaces and co-operation (value chain) and external co-operation (value network), as well as on organisational policy. Moreover, these changes have an effect on the human factor role in spa tourist organisations – from executors of management orders personnel is transformed into a partner in designing and performing tasks and spa tourist products. This means that the spa tourist organisation includes the personnel and the clients in reengineering processes, flow of work, products and services as marketing consumers (marksumers) and producing consumers (prosumers). The problem lies however in the difficulty of measuring the effect of IT on achievement of organisation's intended goals, as IT can both facilitate and impede this process. Computer networks can be given as example here – they improve the organisation's internal and external communication, but on the other hand they require it to change its functioning and style of work entirely, i.e. they impose permanent reengineering and organisational strategy re-definition.

Formulation of an efficient IT strategy for the spa tourist organisation requires knowledge, co-operation and understanding between the top management and IT professionals. This understanding is lacking in spa tourist organisations, mainly because both groups function differently and focus their attention on different functions and activities. Management's missed ideas realised with major outlays involved in IT implementation can cost the spa tourist organisation a lot. The situation is made even worse by the managers' inability to describe their activity as precisely as it is required or at such level of abstraction that would enable translation into IT language. New needs emerging within the spa tourist organisation add to this, requiring modifications of information systems and IT.

THE NEED TO SHIFT FROM VALUE CHAIN TO VALUE NETWORK INSPA TOURISM AND E-TREATMENT

Before open computer networks became common, external relationships between participants of the production and exchange processes in spa tourism and also inside individual organisations of the sector had been occurring with the value chain (according to M. Porter). Physical data flow in interactions between suppliers, producers agents and clients was effected by means of correspondence

(reports, forms, cheques, invoices, store receipts, work charts, schemes and drawings, computer hardcopies), and phone calls, meetings and discussions. In some spa tourist organisations, the physical flow of data was controlled by means of IT management information systems (not always integrated yet). But the physical exchange of information was not eliminated even when telefax, mobile phones, modems and portable computers have become common. No definite breakthrough occurred in the nature of spa tourist organisations functioning or in the work of their personnel (the same working methods were used), although teleworking has become popular, enabling people to work at any place and time, frequently – outside the employer's premises – i.e. „any time and any place".

The introduction of new information technologies, infomedia, the Internet and the Intranet resulted in a thorough verification of the concept of teleworking. The value chain, where organisations and teams functioned within individual „links" of the chain, was replaced by a digital value network and interorganisational integrated information networking systems. Didital value networks integrated interactions of spa hospitals, clinics, specialist outpatient clinics and private medical practitioners with their partners (suppliers, agents, consultants, banks, insurers, etc.), existing or potential clients (via extranet), but also with their competitors. Moreover, they forced one to re-define the remote execution of assignments and to include many non-physical jobs initiated by co-operation within the network. Methods of work changed dramatically as a result of development of virtual organisations (Kubiak B. F., Korowicki A., 1999) and task-focused teams[1], who executed their tasks with the feeling of shared interest, responsibility and mutual support. This, functioning in the digital economy conditions introduced value network and caused that the nature and the function of teleworking was re-analysed, the existing stereotypes of teleworking and its image were abandoned, the perception of teleworking changed (broader co-operation and co-ordination) and finally – what is most important – reengineering and its effects (cost reduction and business process rationalisation) were expanded by the conception of value adding network, supplemented with all employees supporting one another in execution of tasks[2]. This is the beginning of

[1] See also: P. Drucker, 1988, The New Organisation, „Harvard Business Review", January-February and D. Tapscott, 1998, *Gospodarka cyfrowa. Nadzieje i niepokoje Ery Świadomości Systemowej*, Business Press, Warszawa, p. 95 and following.

[2] The supporters of teleworking are indicating the new opportunities of cost reduction (mainly – the energy), environment protection (e.g. as a result of reduced road traffic), professional activation of the disabled and single parents, efficient work. On the other hand, the opponents of this type of work emphasise alienation of employees, reduced communication of co-operating individuals, reduced confidentiality of projects, difficulties with developing the work environment outside the workplace, as well as remoteness of co-operation via the „impersonalised" electronic network (see also: D. Tapscott, 1998, *Gospodarka cyfrowa. Nadzieje i niepokoje Ery Świadomości Systemowej*, Business Press, Warszawa, p. 229 and following.).

the multiorganisation of the future in spa tourism, which will function according to the rule of abandoning the „for me" approach to the advantage of solutions promoting the entire business sector.

INTEGRATED FUTURE MULTIORGANISATION

Any successful marketing in spa tourism depends on the ability to integrate information about the availability of places in particular spa resorts and the charges applied there. In the countries with the advanced development of spa tourism, hotel networks, carriers and catering facilities, specially established consortia, i.e. integrated multiorganisations of spa services uniform booking are put in charge of data integration (D. Tapscott, 1998). These consortia develop network systems of tourist information and spa booking accessible to individual users – potential spa visitors – via the Internet.

Thus, the Internet causes development of a new type of tourist consortia that are able to provide customised packages of spa services faster and easier, sell their offers on the whole or in parts one to another and – what is most important – become involved in new areas of activity. The integrated systems of information and booking facilities being implemented by the consortia can also relieve information systems of individual organisations, directing most of the booking to travel offices and agencies, reduce costs of booking and make the co-operation with agents and partners participating in spa services provision more efficient. The individual users' access to these systems via the Internet eliminates agents (offices and agencies) to a significant degree and increases the role of potential spa visitors in designing their future treatment (choice of a spa resort, of treatment services, doctors, etc.).

So far, most of the medical personnel and spa organisations have not been using modern IT and they have been functioning without any co-ordination or remote consultation with domestic and foreign specialists in particular areas. This shows that the success of treatment and spa tourism projects depends on effective transformation towards globally interworked business. The practice of other countries shows that, to make use of all opportunities and chances in order to develop comprehensive management in spa tourism, one needs to promote the most efficient, independent doctors co-operating within integrated teams in spa hospitals, which in their turn co-operate with other participants of the spa services market on the regional level, becoming elements of local, regional, national and international information structures in this way. Computerisation of the spa tourism business promotes also vertical integration, covering spa services end providers

(hospitals, clinics, private medical practitioners), suppliers of para-spa services and potential spa resort patients and providing co-operation to them by means of internetworking.

DESIGNING THE VIRTUAL TREATMENT

The combination of vertical integration conception (participants of spa and non-spa services and potential patients) and individual approach to spa visitors gives a basis for further development of spa and medical computer networks and records of patients (D. Tapscott, 1998; G. Hamel, Prahalad C. K., 1999). In this way, spa patients as an element of high-efficiency teams gain the opportunity to benefit from medical consultations and advice via networks reaching their homes. Similarly, spa doctors, having the access to spa records and diagnostic monitoring photographs published in the network, will be able to practice their profession directly from their homes. Consequently, one's home may become a part of a comprehensive system of spa tourism and treatment.

Finally, the global network development can contribute to the opportunity for potential spa patients to design their own treatment by means of an interactive multimedia workstation and browsers can begin looking for a suitable spa resort, spa services, specialists and affordable prices. A potential spa visitor, having such information at his/her disposal, can design his/her own treatment vision, contacts and stay in the spa resort. On the other hand, providers of spa and non-spa services have the opportunity to approach to the spa visitor as to the potential client in the field of services and products being offered and those indicated by the patient as proposal supplement. Virtual treatment can contribute to the growth, to making visitors' stay in real world spa more attractive and pleasant, due to building patients' cognitive interests and increasing the availability of natural treatment and anthropogenic resources (booking systems with photographs, prices and rates of services, stay timing and place in concrete facilities and towns).

CONCLUSIONS

Spa tourism development depends on satisfying patients' varying expectations and needs. The achievement of this goal requires spa tourism processes reengineering and the ability to integrate resources and information that constitute the basis of spa offer. It is also necessary to provide greater mutual real time accessibility of end providers of spa and para-spa services who participate in treatment-related services. The fact that spa tourism resources are much dispersed and the resultant limited availability of data describing their condition imply the need to set up a consortium integrating these resources, up-dating them and making them accessible. An urgent need exists for the consortium to establish an Integrated Networking Interactive System of Tourist Information and Spa Resources Booking accessible to both participants of spa services and to potential clients as well. This systems enables one to shift from the value (adding) chain to the value network connecting the participants of treatment services and potential patients.

REFERENCES

Bartczak I. D., 1995, *Informatyczna postać biznesu*, in: „Computerworld", no 9.

Hamel G., Prahalad C.K., 1999, *Przewaga konkurencyjna jutra. Strategia przejmowania kontroli nad branżą i tworzenia rynków przyszłości*, Business Press, Warszawa.

Kisielnicki J., Sroka H., 1999, *Systemy informacyjne biznesu. Informatyka dla zarządzani,* „Placet" Agencja Wydawnicza, Warszawa

Konieczna-Domańska A., 1999, *Biura podróży na rynku turystycznym*, Wydawnictwo Naukowe PWN, Warszawa.

Kubiak B. F., *Model zarządzania informacją turystyczną*, (in:) *Informacja Turystyczna*, scientific editor: Aleksander Panasiuk, Wydawnictwo Uniwersytetu Szczecińskiego, Szczecin 2006, ISBN

Kubiak B. F., Korowicki A., 2005, *Trendy rozwojowe systemów informacji i dystrybucji produktu turystycznego*, (in:) *Polityka turystyczna*, scientific editor: Aleksander Panasiuk, Fundacja na rzecz Uniwersytetu Szczecińskiego, Szczecin 2005, pp. 408-419, ISBN 83-89142-38-4.

Kubiak B. F., (ed.), *Strategia informatyzacji współczesnej organizacji*, Uniwersytet Gdański, Wydział Zarządzania, Gdańsk 2003.

Kubiak B. F., Korowicki A., 1999, *Modele i architektura organizacji wirtualnych i międzyorganizacyjnych systemów informacyjnych*, (in:) ed., J. Oleński, *Procesy i systemy informacyjne w środowisku wirtualnym*, Uniwersytet Warszawski, Warszawa

Kubiak B. F., Korowicki A., 1999, *Modele i architektura organizacji wirtualnych i międzyorganizacyjnych systemów informacyjnych*, (in:) ed., J. Oleński, *Procesy i systemy informacyjne w środowisku wirtualnym*, Uniwersytet Warszawski, Warszawa.

Korowicki A., Kubiak B. F., 1997, *Rozwój turystyki w świetle globalnej integracji systemów informacyjnych*, (in:) *Uwarunkowania rozwoju turystyki zagranicznej w Europie Środkowej i Wschodniej*, v. 4, Zakład Geografii Regionalnej i Turystyki, Instytut Geograficzny, Uniwersytet Wrocławski, Wrocław.

Korowicki A., Kubiak B. F., 1997, *Wykorzystanie technologii informacji w formułowaniu i realizacji strategii regionalnej rozwoju turystyki*, (in:) *Geografia osadnictwa, ludności i turyzmu wobec transformacji systemowej*, red., W. Maik, D. Sokołowski, Wydawnictwo UMK w Toruniu, Toruń.

Kubiak B. F., Korowicki A., 1996, *Strategia rozwoju systemu dystrybucji usług turystycznych*, (in:) *Systemy Informacji Przestrzennej*, PTIP, Warszawa.

Kubiak B. F., Korowicki A., 1996, *EDI szansą zwiększenia przewagi konkurencyjnej w turystyce*, (in:) *Electronic Data Interchange*, ed. M. Niedźwiedziński, Łódź-Arturówek.

Kubiak B.F., Korowicki A., 1995, *Zastosowanie technologii informacji w formułowaniu i realizacji działań strategicznych i osiąganiu konkurencyjności*. (in:) *Komputerowe wspomaganie badań naukowych*, WNT, Wrocław.

Kubiak B.F., Korowicki A., 1995, *Metoda modelowania obiektowego w tworzeniu i funkcjonowaniu GIS*. (in:) *Systemy informatyczne w zarządzaniu aglomeracjami miejskimi.* IBS PAN, Warszawa-Szczecin.

Kubiak B.F., Korowicki A., 1995, *Działania strategiczne technologii informacji dla rozwoju turystyki w regionie*. (in:) *Strategiczne problemy rozwoju regionalnego w procesie integracji europejskiej.* Wydział Ekonomiczny Uniwersytetu Opolskiego, Opole.

Kubiak B. F., Korowicki A., 1994a, *Strategia komputeryzacji gospodarki turystycznej przy zastosowaniu podejścia obiektowo zorientowanego*, (in:) Infogryf `94, TNOiK, Szczecin.

Kubiak B., Korowicki A., 1994b, *Koncepcja obiektowo zorientowanego GIS i jej wykorzystanie w formułowaniu strategii gospodarki turystycznej Regionu Gdańskiego*. (in:) *Informatyka na wyższych uczelniach dla gospodarki narodowej*, Politechnika Gdańska - TEMPUS Joint European Project 3470, Gdańsk.

Kubiak B., 1994, *Analiza systemów informatycznych*, Wydawnictwo Uniwersytetu Gdańskiego, Gdańsk.

Leyland V., 1995, *Elektroniczna wymiana dokumentacji*, Wydawnictwa Naukowo-Techniczne, Warszawa.

Łopaciński K., 1995, *Rozwój produktu turystycznego w Polsce*, (in:) *Turystyka - szansą rozwoju kraju*, Kongres Turystyki Polskiej, Warszawa.

Middleton V.T.C., 1996, *Marketing w turystyce*, Polska Agencja Promocji Turystyki, Warszawa.

Pierścionek Z., 1996, *Strategie rozwoju firmy,* Wydawnictwo Naukowe PWN, Warszawa.

Porter M. E., 1985, *Competitive advantages*, The Free Press, Division of Macmillan, Inc.

Program PHARE - TOURIN, "Rynek Turystyczny" 1996, no 7.

Ritz D., 1991, *Entstehungsmuster und Entwicklungsrichtungen Elektronischer Marktsysteme*, Institut fuer Wirtschaftsinformatik HSG, St. Gallen.

Rozwój turystyki w Polsce, 1996. Fundacja Rozwoju Turystyki TOURIN, Warszawa.

Sporis G., Bochenek B., Król E., Levy-Hillerich D., 1998, Kundenkontakte im Reiseburo. Obsługa ruchu turystycznego według standardów europejskich, Wydawnictwo Szkolne PWN, Warszawa.

Tapscott D., 1998, *Gospodarka cyfrowa. Nadzieje i niepokoje Ery Świadomości Systemowej*, Business Press, Warszawa

Varadan S., Brown K., 1995, *Podróże z Internetem,* Sybex Inc., Warszawa.

Yip G. S., 1996, *Strategia globalna. Światowa przewaga konkurencyjna*, PWE, Warszawa.