

How to Conduct the Audit of Intellectual Capital in Polish Tourism Business?

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Abstract: Intellectual capital (IC) - defined by the values such as knowledge, skills, experience, organisational, social and cultural relations etc. – is one of the most important assets of tourism business and can be perceived as the factor having the greatest influence on the company's value. Due to the leading role of intangible assets in tourism sector, it is important to specify the IC structure and diagnose IC assets for tourism industry. The results of the diagnosis should be taken into consideration in IC management and in the decision-making process within the organisation. The diagnosis of the IC condition is an issue which has not been the subject of any detailed research in Polish environment. The lack of specific tools as well as the real need for resolving the title problem has been the inspiration for a deeper investigation. The goal of the undertaken research was to prepare the methods of IC audit in tourism companies and to create necessary, utilitarian auditing tools. The main objective was to be achieved by performing the research tasks presented in the paper, among which the most important are: Review of the theory and different IC valuating and measuring methods (literature of the subject). Executing the initial research among experts, executives and employees of tourism market, using Individual in-Depth Interview (IDI) and participant observation methods. Preparation of an IC audit's algorithms. Programming a software of IC audit implementation. Application of the IC audit prototype to an experimental group with the aim of eliminating any methodological and technical faults. Implementation of the IC audit in chosen Polish tourism companies. Presentation of the results (reporting). The initial research clearly indicated, that the knowledge resulting from an IC audit is useful and necessary for executives. Reporting of IC audit lets managers identify and highlight the missing or neglected elements of IC structure and recommends certain activities in management procedures, designed to enhance business performance. This paper presents the results of the research done so far, but the main goal is to implement the IC audit tool in Polish tourism companies and prove its efficiency.

Keywords: intellectual capital, intangible assets, IC audit, management, tourism, Poland

1. Theoretical background

1.1 IC theories and valuation methods

Many companies have been recently facing the problem of an inexplicable difference between their book and market value. More and more often powerful companies were collapsing and they were replaced by companies just entering the market. As a result, many researchers focused their interest on understanding this competitive advantage (Roos and Roos, 1997). They found out that account results were not any more reliable as an indicator of the company's value. The most valuable assets became human knowledge and intellectual resources (Karlgaard, 1993). It was already noticed in the early 90s. Many managers tried to manage intangible assets using their common sense and intuition but these assets were defined much later as intellectual capital.

Intellectual capital (IC) is defined as "hidden assets of the company, omitted in its balance sheets" (Wachowiak, 2005). It includes "knowledge, experiences, expertise and associated soft assets, rather than their physical and financial capital" (Klein, 1998).

Until it was measured first time, IC had been known as an invisible hand of the market. To institutionalize intellectual capital entrepreneurs and scientists propose many different IC models (Bontis, Keow and Richardson, 2000; Brooking, 1996; Edvinsson and Malone, 1997; Moon and Kym, 2006; Saint – Onge, 1996; Stewart, 1997). One of best known IC models is 'Navigator', created by Leif Edvinsson (Edvinsson and Malone, 1997). Edvinsson described IC in terms of five dimensions (financial, development, customers, processes and human) which include 112 indices measuring intellectual capital. Then he evaluated IC of the company Skandia and published the results – it was a breakthrough in the intangible assets management.

Another important model is the Broker Technology (Brooking, 1996, 1997), presenting audit as a diagnostic tool of intellectual capital. Broker Technology is a combination of market assets, intellectual property assets, human-centred assets and infrastructure assets. Each dimension is examined through a number of specific audit questionnaires (178 questions). The answers allow to identify and

evaluate IC components. The final result is monetary value of the intellectual capital of a company. This model is appreciated for presenting a complex IC diagnosis for companies of any type (Kasiewicz, Rogowski and Kicińska, 2006).

There are many other approaches to the theory of intellectual capital – to its significance, structure and management. There is a number of different methods of IC measuring and evaluating, different dimensions, indices and indicators (Andriessen, 2004; Brennan and Connell, 2000; Kaplan and Norton, 1996; Lim and Dalimooore, 2004; Lev, 2001; Low and Kalafut, 2002; Sullivan, 2000; Sveiby, 1997). However, all authorities in the field of management agree that intellectual capital increasingly influences the overall functioning of organizations (Stewart, 2001). Due to that, in order to create their image and strengthen position and credibility, companies must measure it and report their IC condition to the market.

1.2 IC role in tourism business

In many kinds of industries managers perceive the importance of intangible assets (for e.g. consultancy, insurance or IT companies), which are considered as the basic for company's development and success. Nevertheless the role of intellectual capital in tourism industry as well as the need for IC management have not been sufficiently recognized and valued yet.

All products on tourism market have one common and unique feature - their production and consumption are simultaneous. That is why they must arise from the creativity and knowledge of the people, who create them. Professionalism and individual know-how of every employee are essential to provide customers with the highest quality products and to satisfy their expectations. These competences are required either from office staff or from those who directly provide services to the customers in destination places. The quality of the dreams bought by customers and served by employees depends on their intellectual potential as specialists in tourism. It depends on drivers and tour leaders during trips, on the travel agent while the customer is choosing his or her travel destination, on every employee of tour operating company while creating the complimentary tourism product etc. How much would be worth the best plane without a professional pilot or a very modern reservation system without people who are able to handle it properly? However, to create a high quality tourism product, all employees and contractors (considered as elements of the company's virtual structure) must closely cooperate. The cooperation can be successful only with an effective human resources management. Furthermore, the effectiveness of IC management should be considered as an opportunity to gain competitive advantage on tourist market.

An audit is one of useful methods facilitating IC management process (review; Sutherland and Canwell, 2004). An audit allows to identify problems of IC management and to define values and the culture of an organization. From an audit perspective it is possible to examine the nature and localisation of intellectual resources (whether they are used, neglected or missing), the ways of using and transferring knowledge within the company and the needs of its employees. However, only properly performed audit is able to identify intellectual supplies within the organisation and deliver useful information to improve the process of IC management.

2. Case study

Polish tourism market is developing dynamically, which is reflected in growing market share, an increasing number of employees in services and a growing quantity of tourist products consumers. Poland's indisputable tourism potential is what makes the presented research concept well justified.

Although intellectual capital is important in all kinds of organizations, this paper focuses on tourism companies of private sector (especially travel agencies), in terms of IC importance to their commercial goal.

2.1 Research objectives

The main purpose of the research is to prepare the methodic to conduct the audit of intellectual capital in tourism companies and to create necessary and utilitarian auditing tool. Testing the designed IC auditing tool within a company is perceived as an integral activity of the research process.

2.2 Research tasks

It is assumed that a regular review of IC state in tourism companies will allow to locate, control and solve internal problems connected with intellectual resources. The analysis of the audit's results enables to formulate and implement IC management strategy or - if one exists - to improve its efficiency and – as a final result in long term – it will help to maximize the company's market value.

Regarding the main goal of the research, there are many methodological and substantive problems to be solved:

- Defining the assumptions of conducting IC audit in tourism companies.
- Determining the IC structure – limitation only to human resources of tourism companies.
- To identify problems associated with intellectual assets of tourism companies.
- Designing technical tools for performing the audit.
- Choosing the methods to assess the nature of changes in IC structure within a company.
- Defining the guidelines and directives for human resources and IC management.

2.3 Implementation

The research process is divided into two parts – the initial and the main study. Each part includes three specific stages (figure 1). The initial research is completed and its results are presented in the article. The main research shall be conducted from February 2009.

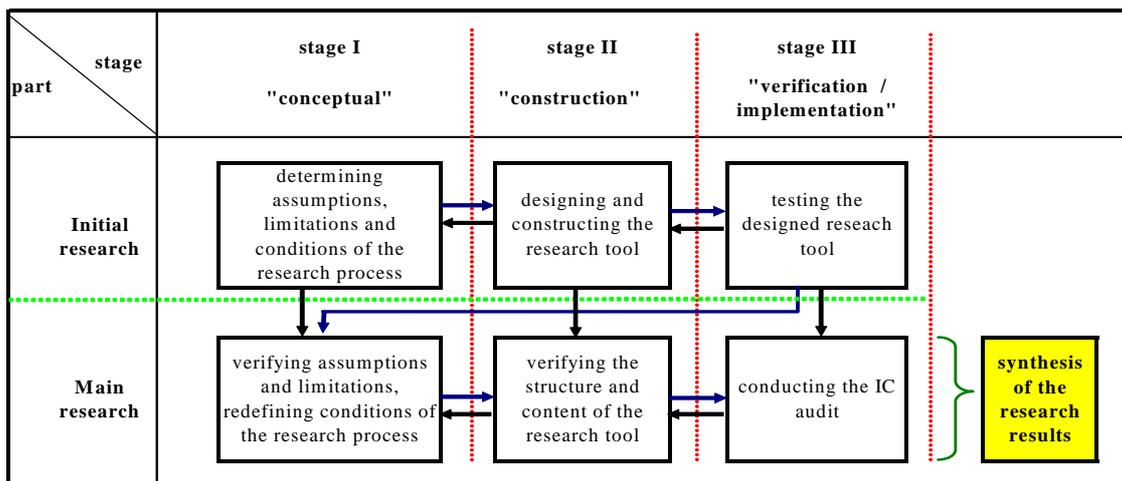


Figure 1: The research structure

2.4 Initial research - conceptual stage

Initial research was focussed on designing IC audit tool and determining assumptions and conditions of its implementation in a tourism company.

First step was to analyze different methods of IC measurement implemented in various Polish and foreign organizations. It was carried out on the background of the desk research and it allowed to determine the possibility to adapt knowlegde about IC to the needs of tourism industry. The different sets of IC components, structures, models and indicators proposed in literature were reviewed.

The conclusions of literature review were completed and verified by carrying out further studies: benchmarking of the similar research tools of IC diagnosis and measurement, participating observation and the individual in-depth interview (IDI).

Participating observation method was used to register work performance of the employees of different tourism companies cooperating to provide services to tourists – hotel staff (20 hotels), tour leaders (50 persons), guides (20 persons), foreign contractors (6), agents (brokers sale – 15 offices), etc. All of them together create a virtual structure of tourism companies and have strong influence on the

condition of company's intellectual capital. Due to the needs of the observation, intellectual assets were divided into two groups:

- Assets possessed and used by employees of tourism companies to perform their duties.
- Assets expected from them by colleagues, superiors, employers and customers.

Observation took place on the territory of Morocco, France, Portugal and Poland (from September, 2006 to November, 2007).

Individual in-depth interviews (IDI) were carried out with those who are not easily available (because of their position or workplace). This method was used twice during the different stages of the initial research. First time, it was conducted with executive (1) and operation managers (3) of a Polish travel agency and tour leaders (12) working for a few different Polish travel agencies (in July and August 2007). Each of them was deliberately chosen on the basis of to their detailed knowledge about functioning of tourism company from the inside (managers) and from the outside (tour leaders).

These studies allowed to recognize the specification of tourism companies (especially tour operating agencies), to determine their virtual organizational structure, to locate their intellectual resources and finally to define criteria of IC in tourism business.

2.5 Initial research - construction stage

To create the tool of IC auditing in tourism companies it was necessary to design software and to prepare the guidelines for using the auditing tool.

The necessary software was designed by a programmer, who followed the instructions clearly defined by the author, it is adequate for the needs of the IC auditing. The next task was to insert into the programme a previously determined list of IC evaluating criteria (in a form of questions). The questions can be put in or out, set and changed depending on the research needs.

The software is installed in the Internet database and can be entered via the author's web site. On the web site respondents may read about the subject and objectives of the research as well as the instruction to the content and form of the audit (also available while completing the audit). Then they access the audit but only by using a previously received user name and a password. It helps to protect the results of the research from distortion and to identify and divide the results if there are several different companies being investigated at the same time. This way of conducting the research gives far-reaching benefits - each respondent can undertake the audit at any time and anywhere, in suitable conditions.

From the technical point of view, the software is divided into three levels:

- Auditing questionnaire – used by respondents to log in and fill in an audit sheet.
- Control panel - used only by the auditor to insert or delete the auditing questions, to put them in an appropriate order, to define all the variables of the audit (depending on one's needs). The panel contains database, where all the research results are collected and automatically analysed. It contains also a search engine, where the auditor can see statistics for particular questions or questionnaire or even choose particular personal data as searching criteria.
- Software algorithm - prepared and administered by the programmer.

The software is available on a CD and can be installed in each tourism company, which has its own server with a PHP interface and a database. In that case, for better protection of the results the access to the audit is possible only via the company's computers.

The audit is composed of following segments: personal data form and auditing questionnaire (containing prepared IC criteria). The questionnaire was previously composed of 241 questions, divided into: twelve sets of inquires thematically related to various IC components and one used as a part of quality research aimed to verify the research tool itself. Once the tool has been verified the number of questions has been reduced, some sets of enquires have been deleted.

Personal data form contains questions on: age, gender, education, place of residence, seniority in the company, seniority on the position, experience in tourism industry and form of contract (13 questions).

The auditing questionnaire (after verification) are as follows:

- Intellectual assets of the employees.
- Ability to get the job well done
- Performance management and controlling
- Company's brand and the "branded employee".
- Overall job/cooperation satisfaction.
- Customer orientation.
- Company's cooperation with external contractors.
- Teamwork and team-building.
- Management strategy and company's values.
- Employee and his/her immediate supervisor (mentoring).
- Intellectual property.

At the end of each auditing questionnaire there is an open question used as an element of quality verification of the tool during the initial research. By this question respondents have the opportunity to judge if the questions are clear, rational and well-aimed concerning the objective of the questionnaire. At this stage all respondents respond to all questions. In the main research questions will be divided into: universal (for all) and specialized - assigned to particular groups of respondents taking into account departments they work in and their position in the company.

The presented software of IC auditing in tourism companies is an utilitarian research tool, simple to implement and to use within the organisation. The auditing results are immediately analysed and graphically illustrated, which is useful, for example, during executive meetings when company's IC state can be easily presented. In the same time it is universal – it can be easily changed and adapted to the needs of any tourism company.

2.6 Initial research – auditing tool verification

The prototype of the research tool was tested from two different points of view: technical and essential. The aim of technical testing was to check if the software functions correctly. The verification of the audit's content was concentrated on the quality of auditing questions and the accuracy of the previously chosen IC criteria and whether they were adequate to tourism specificity. As the final test, it was planned to implement the software in a chosen tourism company. The aim of this stage was to obtain the maximum amount of information and opinions on the tool.

The technical testing was carried out in April and May 2008 on an experimental group of working students (30 persons) to verify the functioning of the software by using CAWI technique (Computer Aided Web Interview). It provided information about various types of errors in auditing questionnaires and technical defects in the form of audit and graphical illustration of the results. It also allowed verification of the method of search engine operating. All errors detected during testing have been successfully removed, for example:

- It was difficult to analyze the comments given by respondents in open questions because they were collected in the database in a form which couldn't be copied or printed.
- The data imported to Excel for further analysis was presented in unacceptable form (unclear, in random order etc.).
- The graphical presentation of the results for selected searching criteria didn't say what criteria was chosen. Consequently, if there were many questions analysed at the same time, it was necessary to go back to the search engine in order to remind previously chosen criteria.
- It wasn't possible to copy the graphical presentation of the results to Excel for further analysis in a form read by this program.

Further testing was related to the content of IC auditing tool and conducted by means of interviews (IDI) with the executive manager of Polish travel agency Triada (1), the operation manager of Bristol Hotel in Warsaw (1) and with professors (8) who are experts in the field of HR (January to March

2008). The aim of IDI was to verify if the set of IC criteria is well chosen, if the questions are properly formulated or if the order of questions is suitable to the audit objective.

The information obtained from the interviews as well as from the answers (previously given to the open questions by a group of students) allowed to correct the content of IC auditing tool. Only these suggestions which were essential for the objective of the research and could significantly improve the quality of the tool were selected and used.

It is important that the respondents were specialists from various kinds of tourism companies or even different industries and they had different work positions. That is why they could look at the research from many different points of view and assess it objectively. Their comments helped the author to see the concept of IC auditing from a fresh perspective.

Some of interesting suggestions resulting from the survey have been presented in the article. For example, in the 4th questionnaire “Company’s brand and the ‘branded employee’” the respondents suggested a question about the employee’s readiness to make sacrifices for the company. Another suggested question was if management is able to convince the employees that they are “branded” and to explain what it means to be a “branded employee”. The employees should be also asked if they identify with the mission of the company, if they have possibilities to be promoted and if there exists a formal way of promotion within the company.

The 13th questionnaire included 10 questions and was used for the initial research to verify the designed IC audit tool. Respondents were asked to assess the quantity and quality of guidance available just before entering the audit. They were asked if the “Help” section contained information they needed while completing the audit and if – in their opinion – the chosen IC criteria were consistent with the research objectives. They could also evaluate the form, content and the number of questions of the audit. Furthermore, respondents expressed their opinion on the idea of carrying out the audit - if proposed IC audit will be a useful source of information about the functioning of the company. If yes, how often it should be repeated. The last question welcomed any additional comments about the survey.

This last part of the audit provided the most valuable information concerning verification of the proposed tool. It showed that the amount of guidance is appropriate for 67% of respondents, 23% think that it is a bit too much, and 7% that it is far too much (figure 2).

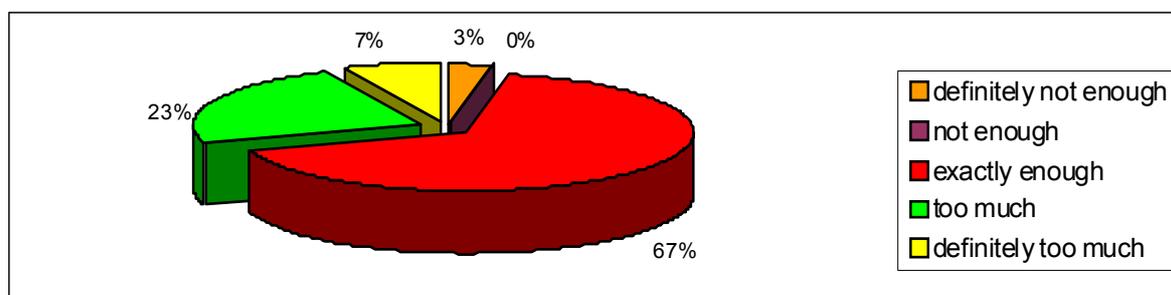


Figure 2: “Choose the most appropriate description of the amount of the research guidance available on the web site”

The amount of information should be reduced to a strict minimum, especially since 90% of respondents did not use at all that information while filling in the audit sheet (question 3). The form of research was appropriate (97% - question 4) and the questionnaires were comprehensible (100% - question 5). The relevance of questions was assessed at an average of 4.5 (question 7).

The proposed tool of IC auditing was evaluated as a useful source of information about the state and functioning of the company (question 8) which should be carried out regularly (77% - question 9). Respondents concluded that proposed audit can stimulate changes within the company. As the audit provides knowledge about needs and expectations the employees are afraid to talk about openly, it may facilitate relations between managers and employees.

2.7 Initial research – implementation

Bearing in mind the testing results, all the necessary amendments in the algorithm of IC audit conducting as well as in the research tool were introduced. So far, the most important change has been made in the content of the audit: the list of IC auditing criteria, within the 12 audit sheets, has been reduced down to 180 questions. The audit sheets have not been presented in this paper because the quantity of the auditing questions is still to be verified and then finally specified; all by the end of the research process.

The last part of the initial research was to partly implement the IC audit tool in chosen Polish travel agencies. Unexpectedly, it turned out that it was not possible to carry out the implementation in a way that had been intended - neither in the last stage of the initial research, nor in the main research (May 2008). The managers asked to conduct the audit within their companies refused claiming that:

- The present situation of the companies, being forced to adapt to the rapidly changing tourism market, is not favourable to carry out this type of research.
- Some of the audit questions are related to “sensitive” issues and confidential information, which should not be known to anybody outside of the company.
- Many questions concern commercial information, which are absolutely confidential.
- Answers to many questions are obvious to managers.
- If the results of the research of one company became known to the others, it would endanger its competitive position on the tourism market.
- Publication of the research results could have negative influence on the corporate image.
- Employees – by completing the audit - could expect some changes in particular areas of company’s functioning, which wouldn’t be possible for the time being. Therefore, conducting the research would cause a clash of interests inside the company.
- There aren’t many travel agencies on Polish tourism market, so in case of the research results publication it would be easy to identify the surveyed companies (even if the identification data were concealed).

Any guarantees of the research results protection did not change the attitude of the managers of the travel agencies asked to implement the proposed IC audit (4 strongest tour operating companies on Polish tourism market). At the same time, these managers emphasized the importance of conducting this kind of research and they were interested in possessing proposed IC auditing tool for their own purposes and internal use.

The exposed problem, which is strongly related to IC valuation in tourism companies, has not been identified before. It showed that tourism companies are afraid to conduct the research because it could reveal weaknesses in the management process, which are known but ignored by the executives of these companies. This problem shall be included in the list of the research tasks to solve (due to its importance in the context of the research objectives).

2.8 Initial research - verification of the research methodology project

In that situation it was necessary to find other way, which could allow the author to achieve the main goal of the research, at the same ensuring time the credibility of the research process. To search the solution, the author decided to carry out different surveys of qualitative character such as interviews and consultations with experts in the field of management, managers and scientists (June 2008).

On the basis of the advice and suggestions obtained, it was decided to conduct an experiment. The research tool will be verified by its implementation in a virtual travel agency. The virtual company will be made up of real - former and current - employees of different tourism companies. The participation in the survey will be voluntary. Each person, involved in this experiment, will be reviewed in terms of its competence to perform well (within the created structure of virtual company). The chosen participants will be clearly informed about the tasks they are expected to perform throughout the experiment. The experiment is to commence in February 2009.

3. Conclusions

3.1 Initial research findings

Initial research consisted of few stages and required different conducting methods. Bearing in mind the goal of the initial research, the results obtained within this research were satisfactory. Even though some of the findings were unexpected, they were interesting from a scientific point of view and valuable for the whole research process. Among the most important findings of the research done so far should be mentioned:

- The prepared and verified set of auditing questionnaires.
- A problem with the implementation of IC audit in a real tourism companies - decision about undertaking the experiment.

3.2 Further research results expectation

The ultimate outcome of the research will be an algorithm of conducting an IC audit within a tourism company. It will include:

- A set of definitions applying to the IC audit.
- Objectives of performing the IC audit in tourism companies.
- Conditions necessary to conduct the audit.
- The recommended frequency of carrying out the audit.
- Timetable and stages of the audit.
- Procedures of the IC auditing tool implementation and performance.
- Methods of collecting and analyzing the results of the audit.
- Rules of choosing the auditor.
- Procedures of authorization to access the audit's results.
- Procedures and a form of reporting the audit's results.
- Evaluation of the IC auditing influence on corporate mission and objectives.
- Evaluation of IC audit effectiveness.

The author expects that regular implementation of the IC audit in tourism companies will result in a report presenting semantic profile of the intellectual capital condition (in a graphic form). This profile is constituted by a compilation of all answers to the auditing questionnaires from different periods of time within one company (following the algorithm of conducting the audit).

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