

Beata Slusarczyk<sup>1</sup>, Klaudia Smolag<sup>2</sup>, Sebastian Kot<sup>3</sup>

## THE SUPPLY CHAIN OF A TOURISM PRODUCT

*The review of advantages and risks of supply chain introduction in tourism with the usage of the Internet is the aim of the paper. The authors surveyed supply chains of a tourism product at chosen enterprises in Poland with special attention to the level of collaboration, benefits and risk sources. The results showed that supply chain of tourism product could not effectively fulfill its role without strong cooperation, particularly important for hotels and travel agencies. The choice of supply chain partners relies on the quality of service provided by potential service partners and their reliability.*

*Keywords:* supply chain; tourism product; hotel; travel agency; tour operator; online booking.

Беата Шлюсарчик, Клаудія Смоларж, Себастьян Кот

## ЛАНЦЮГ ПОСТАЧАНЬ ТУРИСТИЧНОГО ПРОДУКТУ

*У статті представлено огляд переваг та ризиків від введення ланцюга постачань з використанням Інтернету в галузі туризму. Розглянуто ланцюги постачань туристичного продукту на обраних підприємствах Польщі, при цьому особливу увагу приділено рівню співробітництва, перевагам та джерелам ризиків. Результати показали, що ланцюг постачань туристичного продукту не може ефективно виконувати свою роль без тісного співробітництва, що особливо важливо для готелів та туристичних агенцій. Продемонстровано, що вибір партнерів для ланцюга постачань базується на якості послуг, що надаються потенційними партнерами по сервісу, а також на їхній надійності. Ключові слова: ланцюг постачань; туристичний продукт; готель; туристична агенція; туроператор; онлайн-бронювання.*

*Рис. 4. Табл. 3. Літ. 16.*

Беата Шлюсарчик, Клаудія Смоларж, Себастьян Кот

## ЦЕПЬ ПОСТАВОК ТУРИСТИЧЕСКОГО ПРОДУКТА

*В статье представлен обзор преимуществ и рисков от введения цепи поставок с использованием Интернета в туристической отрасли. Рассмотрены цепи поставок туристического продукта на выбранных предприятиях Польши, при этом особое внимание уделено уровню сотрудничества, преимуществам и источникам риска. Результаты показали, что цепь поставок туристического продукта не может эффективно выполнять свою роль без тесного сотрудничества, что особенно важно применительно к отелям и туристическим агентствам. Показано, что выбор партнеров по цепи поставок базируется на качестве услуг, предоставленных потенциальными сервисными партнерами, и их надежности.*

*Ключевые слова:* цепь поставок; туристический продукт; гостиницы; туристическое агентство; туроператор; онлайн-бронирование.

**Introduction.** In literature on the subject, studies concerning tourism supply chains or equivalents which tourism value chain or tourism industry chain, have been rare until now (Zhang et al., 2009; Ke, 2006; Li et al., 2007). The main difference between the supply chain of a tourism product and the supply chains of other products lies in the fact that this is a customer who travels to the place of a product consumption and the product itself is composed of services to a greater extent. Therefore, people play a very significant role in this case as they directly provide services (Tapper and Font, 2004).

<sup>1</sup> Correspondence author; Czestochowa University of Technology, Poland.

<sup>2</sup> Czestochowa University of Technology, Poland.

<sup>3</sup> Czestochowa University of Technology, Poland.

R. Tapper and X. Font (2004) define tourism supply chain as the chain which includes suppliers of all goods and services, who are engaged in providing tourism products for customers. X. Zhang et al. (2009) take the specificity of tourism trade into account and define supply chain as the network of tourism organizations that provide various partial products and tourist services used to create and later to distribute ready-made tourism products in places of tourism. The following chain covers a wide range of participants, both from private and public sectors. Despite the quoted definitions of tourist supply chain, it should also be remembered that they do not stress the existence of customers as the final chain link. Clients with their expectations and demands play a crucial role in creating these chains (Sigala, 2008). While analyzing tourism supply chain, the following elements should be taken into account: its structure (strategies, concepts, distributions channels, competitive advantages etc.), market relations between individuals (e.g. between nutritional unities, accommodation facilities, travel agencies and tourists), the measurement of chain performance (tourists' satisfaction, financial performance, operational efficiency and sustainable development of tourism) (Tigu and Calaretu, 2013; Adriana, 2009). Many entities, which comprise different links of a supply chain, participate in the process of creating and distributing tourism product. The links and the relations between them are presented in Figure 1.

Suppliers of II tier provide services for the suppliers of I tier and tourists usually have no direct contact with them. These links are constituted by food producers, transport and construction materials manufacturers, equipment of tourist facilities, repair and construction companies, media providers, sewage enterprises, telecommunication services providers, souvenirs and guidebooks manufacturers and printers. Suppliers of I tier provide services directly for tourists' benefit, e.g. accommodation and food facilities, carriers, administrators of local tourist attractions, tour guides. They are located in the destination to which tourists travel. The third group is formed by agents – organizers of II tier, i.e. receiving agencies that operate in the places of tourists' reception. They are local distributors and organizers, from whom tourists can buy e.g. a trip to local tourists attractions, already during their stay. These entities provide services for both tourists and tour operators. At the next level of supply chain there are agents-organizers of I tier, i.e. tour operators. They purchase goods and services from the suppliers of I tier and receiving agencies, thereafter they form a complex tourism product out of them, which is sold to customers in their own outlets, through available distribution channels or making use of sending agencies. Sending agencies, placed on the next level of supply chain, act as agents-sellers. They are agents between tour operators and tourists and operate in the place of residence of the latter ones. In their assortment there are usually offers of many tour operators, thus they can better satisfy customers' expectations. Often, they deal with selling airlines tickets, ferry, bus and rail tickets etc. Customers constitute the final link but at the same time the most important one. As they purchase tourism products and the functioning of the entire chain should be adjusted to their needs (Kusa, 2009).

**Internet application in the supply chain of a tourism product.** Dynamic development of the Internet in the last decade has immensely influenced almost all areas of economic and social life and it is not being different in the case of tourism. The progress in the field of technologies allows tourists obtain information on tourist

reception areas, which facilitates the choice of a destination helps in selecting and evaluating a specific agency offer and its purchase (Ferencova et al., 2014; Stefko et al., 2014). According to the study by the portal Interaktywnie.com conducted 17–22 May 2013, 3874 Internet users took part) 78% of the users search for information while vacation planning, 49.62% buy services paying online and 46.51% book the service (while paying on the spot) (Raport: Wakacje przez Internet, 2013).

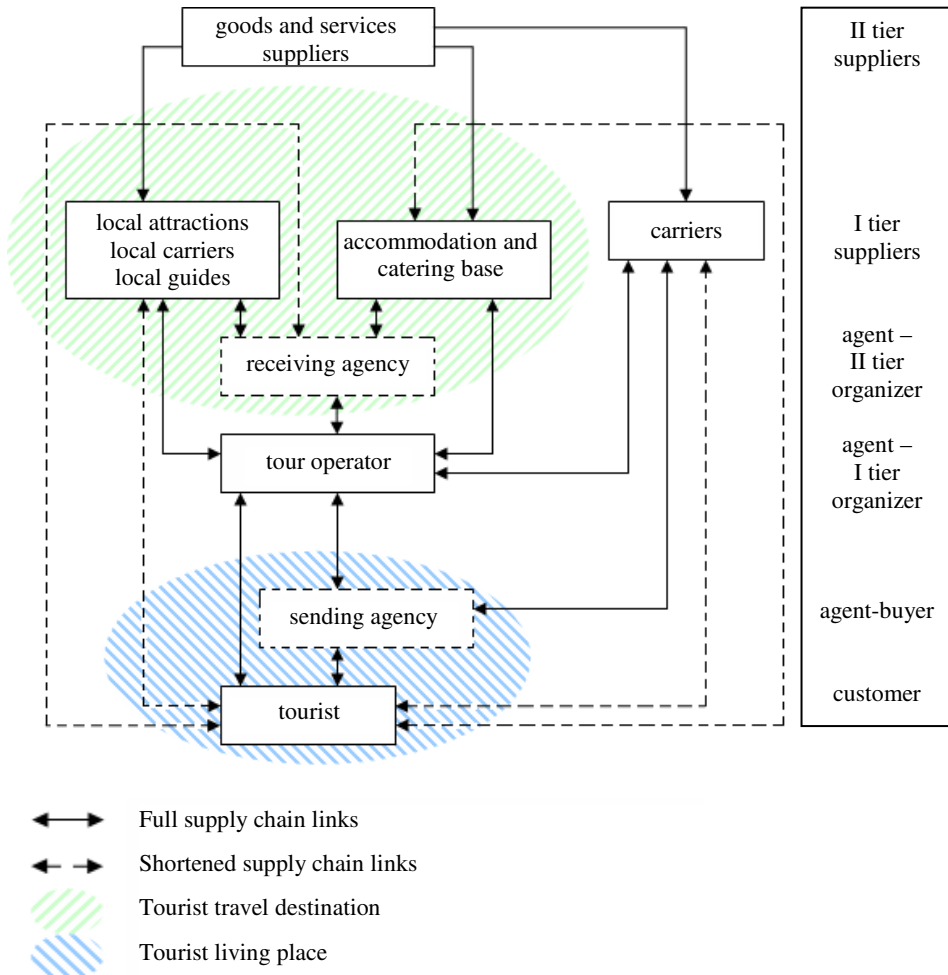


Figure 1. Supply chain of a tourism product (Kusa, 2009)

Owing to the Internet application, new opportunities arise for travel agencies in presenting their offer and gaining customers, however it is not deprived of numerous threats. At present, majority of travel agencies (tour operators, brokers and agents) have their own websites, through which one can purchase a tourist event. Nonetheless, Internet development has contributed to the emergence of a large number of online travel agencies, which represent strong competition for traditional agencies. In addition to using online travel agencies and websites of travel service

providers, tourists can purchase or book chosen tourist services e.g. accommodation or transport. In this way, the Internet has become a very important factor that influences the supply chain of a tourism product, and eliminates travel agencies from this chain in many cases. Tourists who use booking portals can create the most appropriate travel offer for themselves. Table 1 presents the summary of the most popular booking portals in the world.

*Table 1. The summary of the most popular booking portals in the world, as of May 2014, own work based on (The Most Popular Online Booking Sites in Travel, 2014 Edition)*

| Rank | Site              | Estimated desktop visits, mln | Time on site, min | Pageviews per visit |
|------|-------------------|-------------------------------|-------------------|---------------------|
| 1    | Booking.com       | 210.5                         | 7:37              | 6.36                |
| 2    | TripAdvisor.com   | 73.4                          | 4:44              | 3.97                |
| 3    | Expedia.com       | 40.6                          | 6:53              | 5.35                |
| 4    | Hotels.com        | 34.5                          | 5:53              | 4.82                |
| 5    | Agoda.com         | 31.6                          | 7:29              | 5.26                |
| 6    | Priceline.com     | 28.0                          | 7:01              | 7.87                |
| 7    | TripAdvisor.co.uk | 25.0                          | 4:59              | 3.93                |
| 8    | Kayak.com         | 19.7                          | 6:45              | 4.96                |
| 9    | Makemztrip.com    | 18.4                          | 7:35              | 6.09                |
| 10   | Cheapoair.com     | 18.0                          | 5:22              | 3.77                |

**A typical tourism product supply chain and today's electronic chain.** The increasingly widespread use of the Internet in purchasing tourist services by customers results in changing the shape of a traditional supply chain of a tourism product. This change affects the possibility to omit two links in a chain. Stationary agents' offices and tourist brokers are the first link, at which customer may in fact purchase a tourist package with the use of a tour operator's website. Tour operators themselves form the second link, they create tourism packages. Their role can be taken by customer himself who uses booking portals and is able to create a tourism package on his own, the one that fully corresponds to his needs. Therefore, it is legitimate to say that Internet development contributes, in the field of tourism, to the evolution of the supply chain of tourism product and formation of the second type of this chain. In addition to traditional chain, in which a remarkably vital part is played by travel agencies, with both tour operators and brokers and tourist agents, this newer chain appears and is based on the Internet use (booking portals especially), in which the role of travel agencies is taken by final customers (this chain will be termed as electronic supply chain of tourism product in this study).

It must be added that the shape of both chains is convergent to a certain point (assuming identical end-tourist package), it differs only at the stage of an organizer, who is a tour operator in the chain, and in an electronic one it is a client. Both types of chains may have a different number of links, largely dependent on the number of agents. In a traditional chain, receiving agencies and sending agencies (i.e., brokers and travel agents) occur except for tour operators. In electronic supply chain, a customer may purchase partial service at different links, e.g. hotel accommodation may be booked via online hotel booking portal, via a booking portal as booking.com,

hotels.com etc. and with the use of price comparison tourist sites (e.g. trivago.pl), which redirect clients to a selected booking portal.

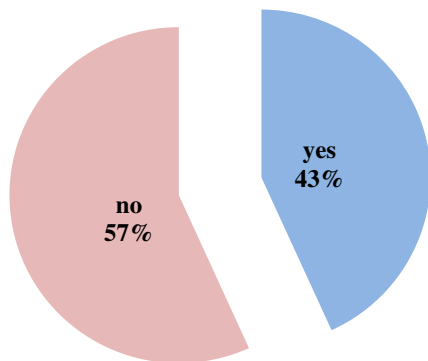
*Table 2. The selected features of a purchase: traditional vs. new supply chains, own compilation*

| <b>Traditional supply chain of a tourism product</b>  | <b>vs</b> | <b>New supply chain of a tourism product</b>  |
|---|-----------|---|
| The necessity to head to the main office of a travel agency to purchase a tourist product                 | vs        | Possibility of purchasing tourist products without leaving home   |
| The possibility of purchasing tourist product only in limited time – during working hours of the office   | vs        | The possibility of purchasing tourist products at any time of the day or night  |
| No need to have access to ICT   | vs        | The necessity to have Internet access   |
| No need of computer or Internet skills  | vs        | The necessity for certain Internet skills   |
| The possibility of paying for tourist products in cash  | vs        | The necessity for having a credit card  |
| Professional staff care at the place of a tourist destination   | vs        | The necessity for self-management at the place of a tourist destination   |
| Comprehensive booking service done by travel agency's employees   | vs        | The necessity for self-booking of all services  |
| Uniform rules for the entire travel package – resignation from the event, transfer to another person etc. | vs        | Different conditions for different tourist services – the necessity to familiarize with the conditions of each service individually |
| High level of payment security  | vs        | A relatively lower level of online payments   |
| All necessary services are included in a travel package   | vs        | The need to remember to book and purchase all kinds of services.  |
| Purchase of many simple tourist products as part of a tourist package                                     | vs        | No possibility to purchase some tourist products via the Internet   |

**Research methodology.** Cooperation between links in the supply chain of a tourism product is characterized from the point of view of two kinds of tourism enterprises: hotels and travel agencies. These two types of entities constitute the links that seem to have the largest influence on the shape and functioning of the entire chain. The study was conducted in the period of 29th May – 5th June 2015. 77 correctly filled questionnaires have been analyzed. The hotels, which were the targets of the survey, have been in the Central Register Hotel Facilities, and travel agencies appear in the Central Register of Tour Operators and Tourist Agents.

**The supply chain of a tourism product in the awareness of tourism enterprises.** First, the respondents were asked to express their opinions whether they were aware of their belonging to the supply chain. Vast majority of the surveyed feel they belong to the supply chain of a tourism product – the answer was marked by 88% of the respondents. A sense of belonging to the chain is not present in the minds of less than 12% of the respondents. These results indicate high awareness of the surveyed as to the existence and functioning of the supply chain. At this point, it is also worth noting that among the respondents who do not feel the sense of belonging to the chain, travel agencies are 2/3, wherein one of them has given a note they have been the organizers of such a chain. Thus, this travel agency considers itself to be the organizer but not the part of the chain at the same time.

Next question in the survey concerned the respondents' possibility of influencing the decisions taken by other links of the chain supply of a tourism product. In the case of confirmation of such influence, the respondents were asked to distinguish the area and the scope of those decisions. The distribution of answers on this question is shown in Figure 2.



*Figure 2. The influence of the respondents on the decisions taken by cooperating enterprises, own presentation based on the survey results*

More than half of the surveyed do not have the influence on the decisions taken by other links of the supply chain of a tourism product. In this group the vast majority (62%) is constituted by hotels. While travel agencies constitute a larger percentage of enterprises declaring the influence on the decisions taken by other links of the supply chain. Among the decisions that the respondents have influence on (both hotels and travel agencies), one can enumerate the decisions concerning prices and the range of tourist goods, offered for further processing and distribution (the largest number of responses), quality and standards of services, and decisions regarding financial settlements (Karas and Ferencova, 2010). Out of the most interesting replies given by travel agencies, one can mention the influence on the decision concerning the purchase of coaches with the specific number of seats and the decisions on the selection of subcontractors in tourism services suppliers on another continent.

In most cases, the respondents while having answered that question, therefore assessed their own influence on partners' decisions, which have directly affected them and not on the decisions concerning the supply chain of a tourism product as a whole.

Potential benefits and risks (Lontsikh and Baiborodin, 2015) that result from the ongoing cooperation within the supply chain of a tourism product have been another issue raised in the study. The respondents were asked to indicate the maximum of three benefits and threats of such cooperation. The distribution of their answers is presented in Figure 3, Table 3.

The respondents considered better satisfaction of customers' expectations as the most important advantage of the ongoing cooperation within the supply chain of a tourism product – that answer was indicated by 79% of the hotels and 82% of the travel agencies. Travel agencies very often also pointed at lowering the costs, in the case of hotels, however that answer was far less popular (marked by 39% of the respondents in that group). A relatively considerable disparity, in the number of indications in both respondents' groups, can be noted in the case of two different bene-

fits: the increase in value added in the entire supply chain, indicated by 37% of the hotels and only 13% of the travel agencies, while the distribution of risk was indicated by 8% of the hotels and 26% of the travel agencies. The least popular answer was "other" – marked only by 2 travel agencies which were requested to clarify the benefits they had in mind, they pointed at the growth in the number of products and at more flexible responses to customers.

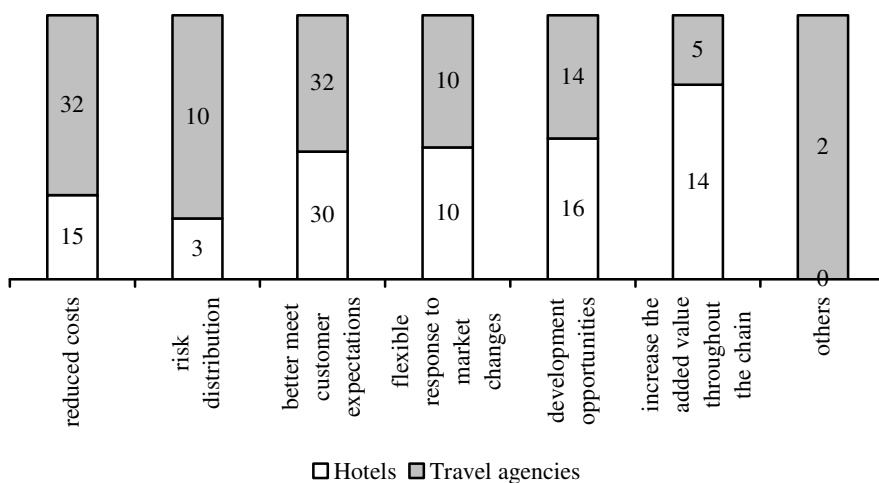


Figure 3. Benefits resulting from the ongoing cooperation within the supply chain of a tourism product, own presentation based on the survey results

Table 3. The risks associated with the ongoing cooperation within the supply chain of a tourism product, own study based on the survey results

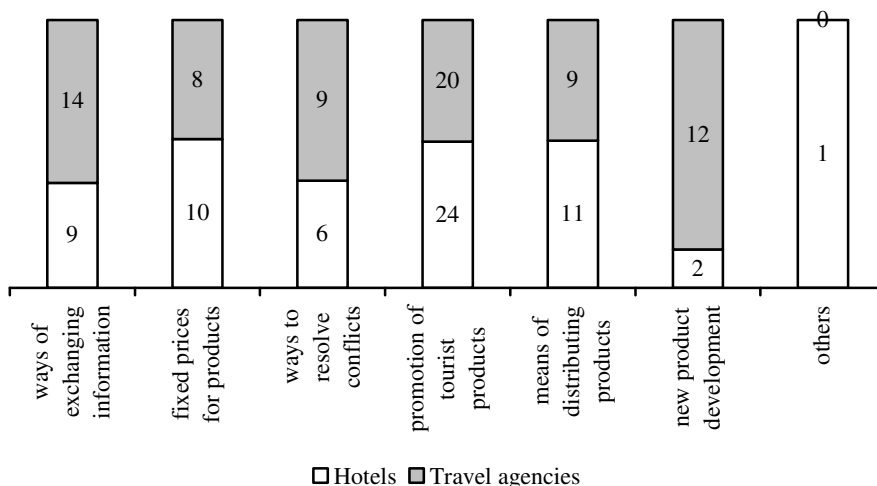
| Potential risk   | Number of indications |                 |
|--|-----------------------|-----------------|
|  | Hotels                | Travel agencies |
| The loss of exclusive control over the activities of a company                         | 2                     | 2               |
| Leakage of confidential information  | 7                     | 7               |
| Subordination of supply chain operations to the interests of the dominant link         | 6                     | 8               |
| Dependence on partners   | 20                    | 20              |
| The necessity to abandon business objectives for the achievement of supply chain goals | 2                     | 4               |
| Bearing the consequences of the errors of other links in the supply chain              | 27                    | 30              |
| Other  | 1                     | 3               |

According to the respondents, the biggest threat to a continued cooperation within the supply chain of a tourism product is bearing the consequences of the errors of other links of the supply chain – the answer marked by 71% of the hotels and 71% of the travel agencies. Only less significant threat resulting from such cooperation is the dependence on partners – the issue of concern for 53% of the hotels and 51% of the travel agencies. The surveyed are far least afraid of losing exclusive control over company’s activities (the response indicated by 5% of the hotels and 5% of the travel agencies), the necessity of resignation from company’s goals for achievement of the

supply chain objectives (respectively 5 and 10% of the responses) and other threats. The respondents listed among other threats the lack of capacity for a quick response to market changes, diminution in the level of service, possibility for a client transfer (not specified where) and too much self-confidence of service providers and the cease of a continuous strive for customers. Leakage of confidential information and subordination of supply chain operations to the interests of the dominant link is a moderate threat for the surveyed – in each group that answer was indicated by less than 10 questioned people.

In the process of analyzing potential threats resulting from ongoing cooperation within the supply chain of a tourism product, it is worth paying attention to the fact that hotels and also travel agencies perceive this problem in a similar way. For each potential problem, the number of indications in both groups was almost identical – the largest difference occurred at the point of bearing the consequences of the errors of other supply chain links, but even in this case it reached the number of only 3 indications. According to the authors, such coherent perception of the threat that arises from cooperation may constitute one of the pillars of effective establishing and maintaining cooperation, as partners will jointly strive to eliminate these problems.

Another issue that allows for better characteristic of the respondents' attitude to participation in the supply chain of a tourism product, is the issue of areas which they would be able to return to a joint decision-making process by all the links of the chain. Distribution of the answers to this question is presented in Figure 4.



**Figure 4. The scope of decisions, which the respondents would be willing to return to a joint decision-making in the supply chain,**  
*own study based on the survey results*

Most respondents acknowledged they would take joint decisions with other chain links on the promotion of tourism products – 63% of the hotels and 51% of the travel agencies declared that willingness. Other responses of the surveyed were indicated less frequent. Only one respondent marked the answer "other" adding that it would be impossible to give any of the decisions to a joint decision taking process.



Such attitude may suggest that one is not interested in establishing close cooperation within the chain supply.

The most significant disparity in the willingness to take joint decisions with other links of the chain supply can be observed for creating new products – 31% of the travel agencies are willing to share such decision-making power. In the case of other decisions, the respondents' replies from both groups were relatively consistent (only one larger discrepancy concerned the ways of exchanging information – that answer was marked by 24% of the hotels and 34% of the travel agencies). The willingness to return the same decision-making areas to joint decisions should result in a significant simplification of cooperation on the matters concerning these specific issues, and this in return may help strengthen general cooperation of the links in the entire supply chain of a tourism product. Partners' codecision in the issues crucial for supply chain functioning allows effectively satisfy customers' needs, taking the interests of a larger number of links of the chain into account.

The last question asked in the survey concerned the most frequent reason for not fulfilling customers' expectations by the supply chain and it was an open question (therefore, some respondents did not reply). Most often indicated causes are improper communication between the links of supply chain (7 indications), the selection of wrong partners and their incompetence (6 indications), inadequate information about offers (5 indications) and the lack of understanding or ignorance about clients' needs (4 indications). Among the main reasons, many respondents (interestingly these were only travel agencies) highlighted the matters on the side of a client – inflated expectations and indecisiveness. It means that part of travel agencies blames customers for not satisfying their own needs, do not see their own fault and of other links in a supply chain of a tourism product.

Other replies concerned the following issues:

- lack of supervision over preparation and distribution of a tourism product as the final product;
- the lack of checking the service quality prior to its distribution (accommodation, catering, tour guides' language skills, age and vehicles' equipment);
- the lack of partners' flexibility at implementation of a part of a tourism package;
- bad quality of the services provided;
- political and economic instability of tourist countries;
- lack of opportunity to reduce costs;
- too many agents;
- human errors;
- random events.

Many respondents are aware of the fact that not satisfying customer's needs in the supply chain of a tourism product is largely due to the problems associated with links' cooperation. This allows stating that both hotels and travel agencies are able to look at the problem at the macrolevel and see that effective cooperation of links in the supply chain of a tourism product as one of the basic conditions to meet tourists' expectations (at the same time achieve business objectives). The awareness of strong relations between cooperation of the chain links and fulfilling clients' expectations

may bring more positive attitude to the issue of tightening collaboration with other tourist businesses and improving the quality of this cooperation.

**Conclusions.** None of the supply chain of tourism product could effectively fulfill its role without cooperation between the links that create this chain. Such cooperation is particularly important in the case of hotels and travel agencies, since these two kinds of entities have the largest share in creating tourism products. Among the intentions that cause hotels and travel agencies engage in cooperation with other links of tourism chain, the need to improve the quality of customer's service is placed in the foreground, increasing the scale of operations, profits and greater flexibility. In turn, the choice of partners relies on the quality of service provided by potential service partners and their reliability. The conducted research have proved that almost all the surveyed companies feel themselves as the link of the supply chain of a tourism product, which is certainly a major step towards integration and continuous cooperation of entities within the chain. However, despite the fact that the surveyed feel as the links of the supply chain, the majority of them state they do not influence the decisions taken by other links of the same chain. This may mean that integration of the links in this chain is at a low level and yet they have not created a coherent vision of the activity, and they have not developed a common decision-making mechanisms. Better satisfaction of clients' expectations, reduced costs and possibilities for development are the most important benefits of ongoing cooperation within the supply chain of a tourism product. In turn, taking the consequences for the errors of other links of the supply chain and dependence on partners seem to be the most serious threats for such cooperation. The respondents also expressed the opinion that the easiest way would be to agree on co-decision with other partners in the issues regarding tourism products promotion. In terms of the most frequent causes of not meeting clients' needs in the supply chain of a tourism product, both groups marked improper communication between partners, selection of wrong partners and inadequate information about offers. Certainly, a shared vision of hotels and travel agencies on many cooperation areas allows implying the possibility of closer integration within the chain, and as for the initiators it points at the mentioned groups of entities.

The performed here research does not cover all the aspects in functioning of the supply chain of a tourism product. It would be worth examining the reliability and accuracy of information in electronic supply chain, identifying the role of opinion-forming Internet portals and the actual value of information and opinions they contain (Keating, 2009). Furthermore, it would be interesting to conduct a study defining the security of transactions in the supply chain or the transmission between its partners.

#### References:

*Adriana, B.* (2009). Environmental supply chain management in tourism: The case of large tour operators. *Journal of Cleaner Production*, 17(16): 1385–1392.

*Ferencova, M., Misencikova, V., Kot S.* (2014). An Analytical View of Using E-Communication Tools in Promoting of Selected Pilgrim Tourism Sites in Slovak Republic. *Journal of Environmental Management & Tourism*, 5(2): 223–227.

*Karas, L., Ferencova, M.* (2010). The survey of attitudes of students of management toward travel tour prices. *Polish Journal of Management Studies*, 2: 172–178.

*Ke, L.U.* (2006). An Initial Discussion on the New Pattern of the Supply Chain in Tourism Industry. *Tourism Tribune*, 3: 30–33.

- Keating, B.* (2009). Managing ethics in the tourism supply chain: The case of Chinese travel to Australia. *International Journal of Tourism Research*, 11(4): 403–408.
- Kusa, R.* (2009). Analiza lancucha dostaw produktu turystycznego. In: Pyka, J. (ed.). *Konkurencja i kooperacja w strategiach zarzadzania organizacjami*. TNOiK, Katowice.
- Li, W.L., Yan, H.P., Li, P.* (2007). Several Problems regarding the Study of Tourism Supply Chain. *Tourism Tribune*, 9: 023.
- Lontsikh, N.P., Baiborodin, B.A.* (2015). Supply Chain Management: Methods and Tools for Food Production Safety and Risks Minimization. *Actual Problems of Economics*, 168(6): 138–144.
- Raport: Wakacje przez Internet, 2013 // [www.interaktywnie.com](http://www.interaktywnie.com).
- Sigala, M.* (2008). A supply chain management approach for investigating the role of tour operators on sustainable tourism the case of TUI. *Journal of Cleaner Production*, 16: 1590.
- Stefko, R., Bacik, R., Fedorko, I.* (2014). Facebook content analysis of banks operating on Slovak market. *Polish Journal of Management Studies*, 10(1): 145–152.
- Stefko, R., Nowak, S.* (2014). Cooperation shrines of Europe in regional management and development. *Polish Journal of Management Studies*, 10(2): 209–215.
- Tapper, R., Font, X.* (2004). *Tourism Supply Chains*. Report of a Desk Research Project for The Travel Foundation, Leeds Metropolitan University, Leeds.
- The Most Popular Online Booking Sites in Travel, 2014 Edition // [skift.com](http://skift.com).
- Tigu, G., Calaretu, B.* (2013). Supply chain management performance in tourism. Continental hotels chain case. *Amfiteatru Economic*, 33: 106.
- Zhang, H., Song, H., Huang, G.Q.* (2009). *Tourism Supply Chain Management: A New Research Agenda*. *Tourism Management*, 30: 345–347.

Стаття надійшла до редакції 12.11.2015.