INFLUENCE OF INFORMATION SOURCES ON TOURISTS: A CASE STUDY OF STUDENTS OF MARKETING AND MANAGEMENT IN THE SILESIAN REGION

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Abstract. *This paper presents the results of a field research on the changes that take place in student preferences regarding communication with tourism services, preferences on the ways to search for information sources about place destination and a first inside about payment forms for tourism and hospitality services. The study was conducted twice, in 2015 and 2018, among students of tourism management and recreation at the Kukuczki Academy of Physical Education in Katowice and the Banking Higher School in Chorzów.*
Keywords: consumer communication, consumer satisfaction, hospitality service, information search, Internet, tourism services.

Introduction

The beginning of the Internet in Poland dates back to 1990 when the first e-mail to the Institute of Nuclear Physics in Krakow was sent from European Council for Nuclear Research (Conseil Européen pour la Recherche Nucléaire – CERN). Unfortunately, the development of the internet was conditioned by the practices of monopolists. First, the process was withheld by the National and Academic Computer Network, which became the actual monopolist dictating the technical and pricing conditions of Internet access, followed by monopoly functions taken over by Telekomunikacja Polska, which until the early 2000s used its dominant position in access to the Internet (Meissner, 2016). Over the past few years, an expanding range of Internet access options has had an impact on the massive development of the online community in Poland.

In this paper, we present the results of an ongoing research that aims at investigating the attitudes of young people in the use of the internet for planning travels and tourist services.

On this purpose, we compared the outcomes of two surveys, one conducted in 2015 and the second in 2018 among students of tourism management and recreation at the Kukuczki Academy of Physical Education in Katowice and the Banking Higher School in Chorzow. Our paper illustrates the changes that took place in student choices regarding communication with tourism services, e.g., preferences on the ways to search for information sources about place destination and the forms of payment for tourism and hospitality services.

Five travel sites can be considered the best places to start travel planning (Table 1). They provide functions to search for the different forms of holidays and types of accommodations.

Literature review

Since tourism is one of the primary economic sectors and, accordingly, many countries are competing to attract tourists through all means of communication and such communication has become a major driver of touristic sectors all over the world. The role of communication is to inform prospective tourists and influence their choices regarding touristic destinations and the type of touristic products they purchase. To attract prospective tourists in this digitized world, modern ICT strategies are needed, and it is necessary for the tourism industry to rely on ICTs and especially the internet as tools of international communication (Wagaw & Mulugeta, 2018).

Tourism as an information intensive industry can gain important synergies from the use of the Internet. The tourism sector has been a pioneer in adopting and developing ICT applications and today is rated among the top product or service categories purchased via the Internet (Deyna & Mroczek-Czetwertynska, 2018).

Travel products and services appear to be well suited to online selling because they possess the characteristics that can function in the electronic environment. Products and services that have a low cost, are frequently purchased, have an intangible value proposition and/or are relatively high on differentiation are more amenable to be purchased over the Internet (Ochoa, Herman, & Marzano, 2016). Specifically, travel products are high involvement products that are less tangible and more differentiated than many other consumer goods, which make them suitable for sale through the Internet

Travel and hospitality have always been about assisting and anticipating needs, and we're barely scratching the surface in terms of how this technology can be used to simplify and streamline the entire consumer journey," Heckmann said. "As an industry, we're getting to a place where we can help travellers get whatever information they need about a new destination, flight, hotel or activity

as quickly and easily as possible, with smarter recommendations that learn and evolve over time (Loo, 2017; Ochoa, 2018)

To understand the tourist preferences of university students and the role of the Internet on planning a trip, it was decided to conduct a survey involving students of Sport and Tourism management at the Kukuczki Academy of Physical Education in Katowice. The better understanding of their virtual behaviour in their search for information for tourism destinations will encourage tourism operators to invest in a proper way in e-promotion and e-resources, in order to increase their business (Schiopu, Padurean, Tala, & Nica, 2016)

The best travel site (see table 1) should be a valuable tool in creating your ideal trip, whether you're planning an overseas vacation, a business trip, or a weekend road-trip. These websites work like robotic travel agents. Instead of asking you to go to the dozens of airline websites and hundreds of hotel websites to search for your ideal dates and route, travel sites perform all of these searches with a single click. To find the best, we looked for websites which could search for a variety of bookings, and tracked prices and user experiences focusing on flights, rental cars, and hotels, and bring us back the best services at the best prices (reviews.com, 2018).

To decide the best travel sites, reviews.com decide to analyse four factors:
- price is the undisputed king in the travel world
- flexible date tools let you see what happens if you slightly adjust dates for a proposed trip
- whether tracking down the right hotel amenities, locating a specific car type, or making sure our plane ticket covers baggage fees, it's crucial to have great comparison features on a travel site
- the best travel site should have pages that load quickly, display relevant results, and don't leave us wondering if we've accidentally clicked on spam

*Table 1 **The best travel sites** (reviews.com, 2018)*

Sites' name	Booking	Expedia	Kayak	Hipmunk	Priceline
Topic	Best Airfare Site	Best Car Rental Site	Best for Flexible Planning	Best for Comparing Features	Runner-Up Best Car Rental Site
Airfare Prices	Best	Average	Good	Good	Expensive
Car Rental	N/A	Best	Average	Average	Expensive*
Flexible Dates Options	+/- 3 days	N/A	+/- 3 days; monthly search	+/- 3 days	+/- 1 day
Web page	https://www.booking.com	https://www.expedia.com	https://www.kayak.pl	https://www.hipmunk.com/	https://www.priceline.com/

Source: own study based on: The future of travel. Think with Google, 2018.

Research approach and methods

The study was conducted twice among students of management and tourism and recreation at the Kukuczki Academy of Physical Education in Katowice and the College of Banking in Chorzów. In 2015, 93 women and 50 men (average age 22.6, standard deviation 1.2 years) took part in the research. In 2018, 112 men and 91 women (mean age 22.8, standard deviation 2.8 years). he tests were carried out each month in the month of May / June. To conduct the survey, the Google forms tool was used to create an online questionnaire and then by providing a hyperlink to students to conduct an online survey. The results available through Google sheets have been transferred to Statistica 13 from StatSoft, Inc. The questionnaire used closed single choice questions, hierarchy questions as well as open questions. For data analysis, descriptive statistics and quantitative techniques were used. To test the hypothesis that two qualitative traits in the population are independent, a $\chi2$ test was used to compare the rates observed with expected frequencies.

$$\chi^2 = \sum_{i=1}^{n} \frac{(O_i - E_i)^2}{E_i} \qquad (1)$$

where:

$\chi2$= Chi-squared test, **also written as** χ^2 test, is any statistical hypothesis test where the sampling distribution of the test statistic is a chi-squared distribution when the null hypothesis is true

O_i = the number of observations of type i

E_i= the expected number of observations of ty*pe i*

Also The Mann-Whitney U test which is a nonparametric alternative to the t-test for independent samples:

$$Z = \frac{R_1 - R_2 - (n_1 - n_2)(n+1)/2}{\sqrt{n_1 n_2 (n+1)/3}} \qquad (2)$$

where:

R_1 means the sum of the rankings awarded to the values of the first sample

R_2 is the sum of the ranks given to the values of the second sample

n means the total number of observations ($n = n_1 + n_2$)

Discussion and results

Students assess the "very useful" usefulness of the Internet to find attractive tourist offers. Students see more and more Internet-related strength. In 2015 - 62.2%, and in 2018 - 66.0% of respondents stated that the Internet is very useful for the above purposes. Also at the moment the assessment of the extent to which they use the Internet to find an interesting tourist event? "Increased the number of people using the Internet.

In this year's research, more than 41.3% use only the Internet to search for interesting offers is a slight increase compared to the answers from 3 years ago (0.5%), however the greater difference is in the answers at the option level 4. Here, the difference is 3.5%. Generalizing for 78.6% of respondents, the Internet is a very important opportunity to get to interesting events. In subsequent questions, students were asked to determine the importance of individual electronic communication channels with a travel company on a scale of 1 to 5, where 1 - is not needed at all, and 5 - is very necessary. The most important channel turns out to be an e-mail. Almost 90% of respondents state that this communication channel is important or very important (82.7%). The popularity of email is great despite the fact that many letters get in the form of spam. However, it is certainly a big advantage of the e-mail that in its form the e-mail is closest to the traditional letter, which can still create a sense of credibility. All contracts and invoices have been credited until recently with signatures on "normal paper". However, there is a slight decrease in the importance of this channel. In the 2015 study, the e-mail was valid or very important for 89.4%.

Another important communication channel can be a discussion group. 47.1% of respondents in 2018 described this channel as necessary or very necessary. However, this is more than a seven-percent decrease compared to 2015 when 54.6% thought so. Despite the fact that with the advent of chats or software for direct communication, discussion groups have become a less-used communication tool, however, this environment is still considered by many Internet users as a place for factual and substantive discussions. Also the significance of chat or software enabling communication with the company on the website slightly decreases. In 2015 - 44.8% of respondents stated that the chat was needed or very necessary, while in 2018 it granted 43.0%.

E-mail, discussion group and chat lose their validity, while the drop in discussion groups is statistically significant (Z = -1,913 at p = 0.05). What is the reason? You could probably specify that the last time you can fan page on a social network, that is, in the overwhelming majority of Facebook. In 2018, respondents were also asked about this channel. 81% of them stated that it is needed to a large or very large degree, which almost equalled communication via e-mail. Probably fan page is not yet used in a conscious manner by many companies, however, this potential should be managed.

Respondents asked for the answer which for them is the favourite way of communication with the tourist company for the most part choose e-mail. However, during the three years there is a quite large drop from 55.3% in 2015 to 45.7% in 2018. A direct conversation, which three years ago was an important option mentioned by 16.6% of respondents in the last 3 years, almost lost its full significance (0.5% in 2018) for a phone call which was chosen by 40.8%. It can be explained sometimes, which is saved as a result of a lack of a visit to a tourism

office or a tourism company. The role of chat has dropped from 8.0% to 1.6% in the last three years, while Facebook has increased from 1.5% to 4.3% in 2018.

The distribution of responses in 2018 with the division into women and men turns out to be interesting. Over 51% of women and only 36% of men chose e-mail as a favourite communication channel. This is a statistically significant difference ($\chi2 = 6.44$, with $p = 0.0111$). Men more often choose a telephone call (42.3%) with 34.8 percent of women (see fig. 1).
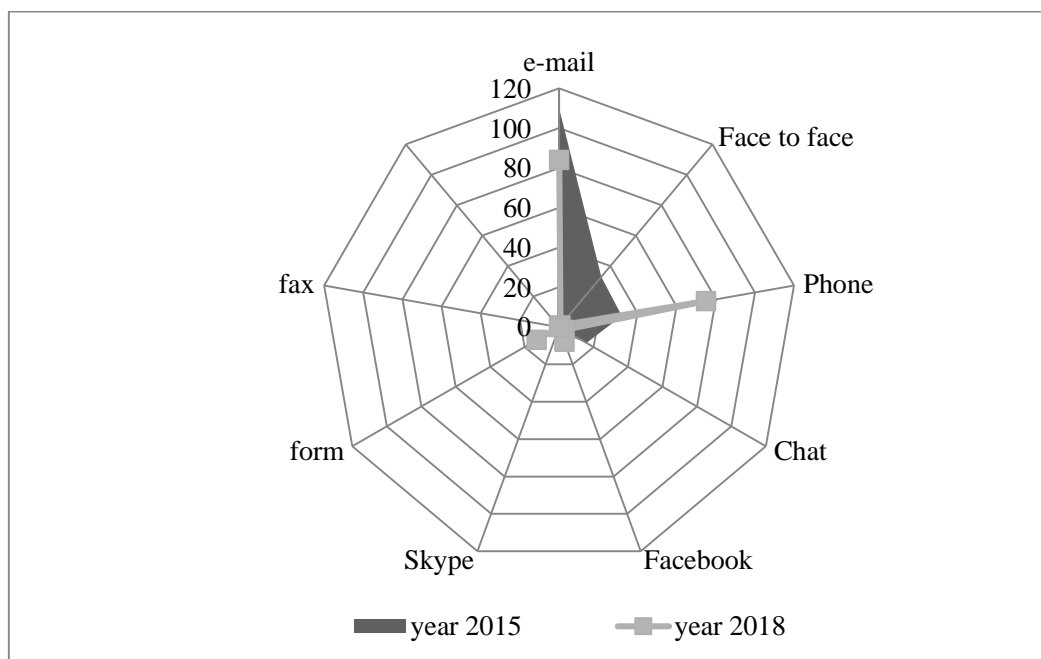
Figure 1 ***Favourite way to communicate with the travel company 2015 & 2018***
(own study)

Considering that e-mail is still the most important channel of communication with a tourist company, and not in real time, the next question arises itself. How long should we wait for the reply of the letter sent. It turns out that respondents are more and more demanding in this area.

As recently as in 2015, 17.1% of people were able to wait for the answer two days and more. This percentage decreased in 2018 to 6.5%. In turn, the number of people within 3 years increased by 13.6%, which they believe that the response to the e-mail should come within 12 hours (37.9% in 2015 and 51.5% in 2018). This is a big jump of customer requirements. Thus, over 90% of clients (93.6%) want to know the answer within one day.

At the same time, when analyzing this year's gender research, it is not possible to present a thesis (as 3 years ago) that there is a statistically significant difference between men and women. The women's requirements have leveled out with men and even slightly overtook them. 52.7% of women and 50.9% of men

think that the reply to the letter should arrive within 12 hours. Three years ago, over 45% of men and 35% of women said they should get a response within 12 hours (The Mann-Whitney U test $Z = 2.48$, $p = 0.01$).

Major changes concern preferences in the search for tourist services. In 2015, the most popular was browsing group purchases such as Groupon or TravelBird (35.3%). This way in 2018 dropped to the level of 16.9%. Meanwhile, the most popular platform in the meantime was booking.com, which jumped from 3 percent to as much as 39.8%. The meteo search engine, in turn, had 33.6% of responses in 2015, while in 2018 28% of Airbnb gained popularity as well. A small amount three years ago has been transformed into 5.7% this year. It should be noted that there were many other indications this year. Answers other than the above this year are almost 10% (compared to 5.1% 3 years ago). Among these answers were listed such.pl.pl (2.4% of all responses), holiday pirates (1% of all responses), tripadvisor, fly4free, and hostelworld. There are no major differences between the sexes in the preferences of the parties. Only the higher Airbnb preference among men (13% of responses) than women (4% of responses) is noted (see fig. 2).
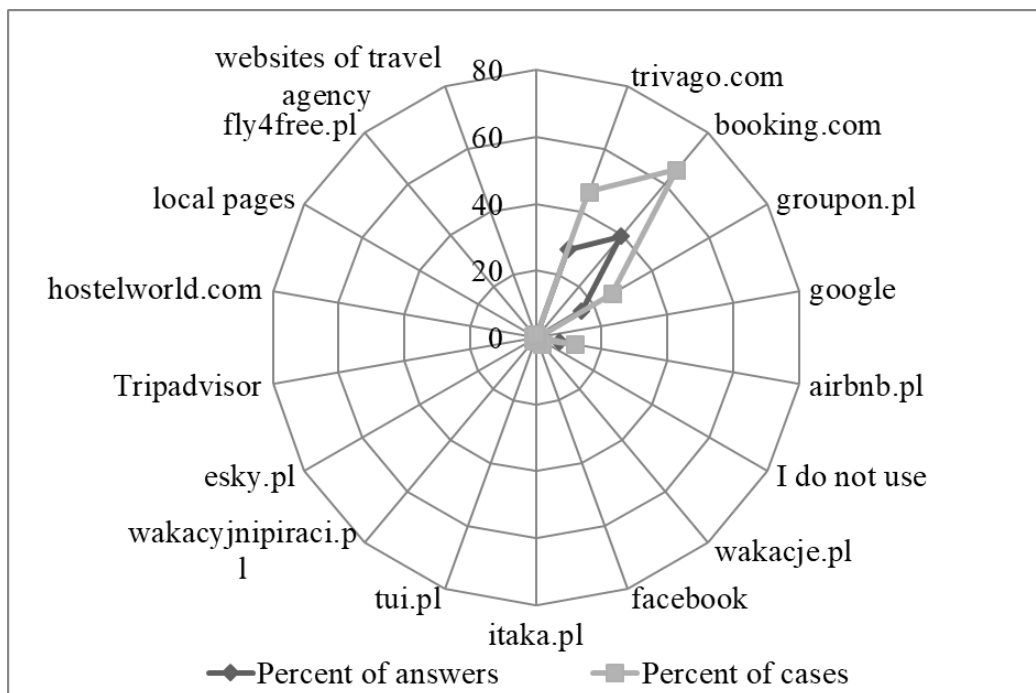

Figure 2 **Website use for choosing a tourist service 2015 & 2018**
(own study)

A wider range of different payment options is noted. In 2015 respondents answering the question "what payment channel you choose for the services and products ordered on the Internet exchanged on average 1.44 and in 2018 per person fell 1.8 of the preferred options. There are differences in the preferences

of individual channels. If in 2015, half of all responses focused on a traditional bank transfer, already in 2018 this channel accounts for only 27.8% of responses. About one-third of the responses are a fast online transfer option (33.3% in 2015 and 33.0% in 2018). This makes this channel the most popular way to pay online this year. However, other ways are also becoming more and more popular. The payment card from 11.7 increased to 17.6% of the response, PayPal from 3.2 to 7.8% as well as the payment by mobile phone increased to 8.1%. Payment on delivery can be said to be the most reliable payment method 7.8% (see fig. 3).
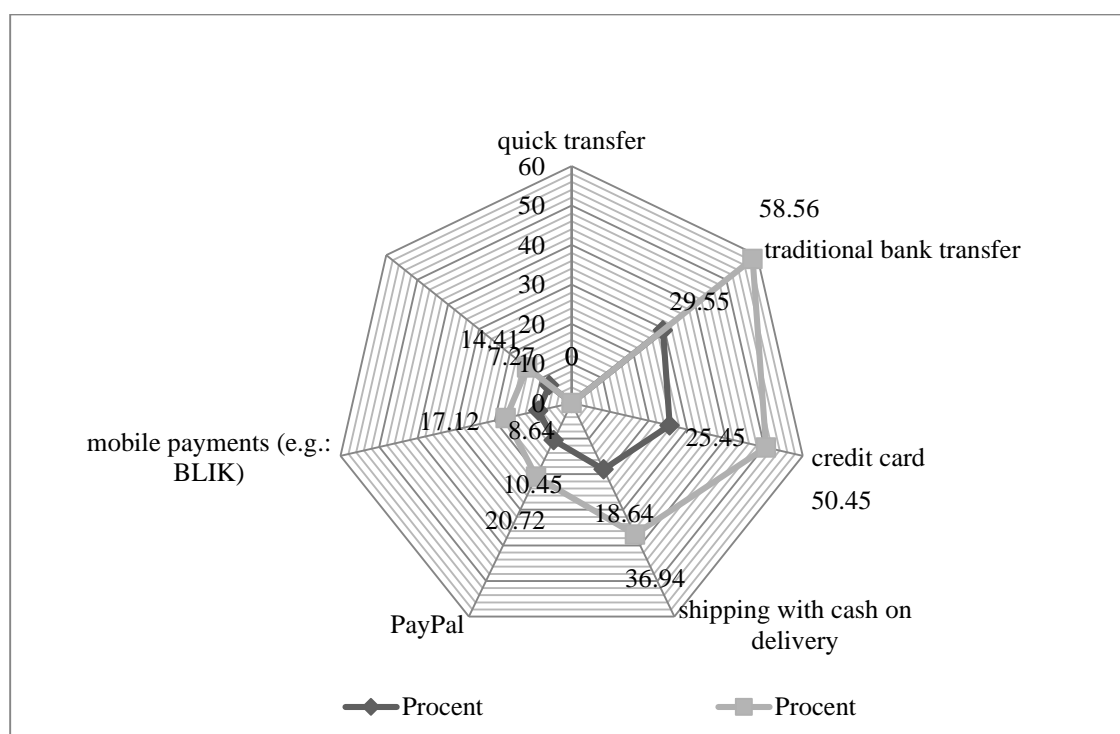
*Figure 3 **Type of payment for the ordered online tourism services 2015 & 2018***
(own study)

Depending on the gender, we can see some differences in the preferences of payment methods. The traditional bank transfer is more popular among women (31.3% of responses) than in men (25.5% of responses). In turn, more men chose a payment on delivery (10.5%) in relation to women (4.0%). Perhaps this is related to different types of shopping among men and women. An in-depth questionnaire analysis would be needed to establish the above.

In the last question, students were asked to answer how often they receive tourist advertisements by mail. Considering that usually such e-mails are not welcomed and treated as spam it is comforting that over the years the frequency of receiving such ones decreases. In 2015, exactly 21% of respondents stated that

they receive such mail every day or even several times a day. This percentage fell to 11.4 in 2018.e

Conclusion

Despite the limitations of our sample, a few interesting elements emerged from our study. For instance, there are differences in the preferences of payment methods that appear related to gender. The traditional bank transfer is more popular among women (31.3% of responses) than in men (25.5% of responses). In turn, more men chose a payment on delivery (10.5%) in relation to women (4.0%). Perhaps this is related to different types of shopping among men and women. An in-depth questionnaire analysis would be needed to establish the above.

For the answer, how often do they receive tourist advertisements by mail. Considering that usually such e-mails are not welcomed and treated as spam it is comforting that over the years the frequency of receiving such ones decreases. In 2015, exactly 21% of respondents stated that they receive such mail every day or even several times a day. This percentage fell to 11.4 in 2018.

Our research will continue focusing on young people travel lifestyle, investigating their preferences on destinations. We would like to investigate the relationship between their intention to travel and their travel chooses. On this purpose, we are planning to analyze the data available on the most popular tourism platforms, such as booking.com and expedia.com. The results of our research will provide suggestions for designing proposals that meet young people expectations and desires. Our research will continue focusing on young people travel lifestyle, investigating their preferences on destinations. We would like to investigate the relationship between their intention to travel and their travel chooses. On this purpose, we are planning to analyze the data available on the most popular tourism platforms, such as booking.com and expedia.com. The results of our research will provide suggestions for designing proposals that meet young people expectations and desires.

References

Deyna, B., & Mroczek-Czetwertynska, A. (2018). *The Concept of E-Tourism in the Smart City Assumption as an Opportunity for the Development of Tourism in Walbrzych*. DOI: https://doi.org/10.2478/ers-2018-0028
Gomez-Ullate, M., Ochoa Siguencia, L., Alvarez Garcia, J., & Rama, M. (2018). Cultural Routes & Heritage. *Tourism & Rural Development. Book of Proceedings.* INBIE, Czestochowa.

Loo, J. (2017). *The future of travel: New consumer behavior and the technology giving it flight. Think with Google*. Retrieved from https://www.thinkwithgoogle.com/marketing-resources/new-consumer-travel-assistance/

Meissner, A. (2016). *The "Big Bang" of the Internet in Poland occurred exactly a quarter-century ago, initiated by scientists from the University of Warsaw's Faculty of Physics.* Retrieved from http://www.fuw.edu.pl/press-release/news4661.html

N.A. The Best Travel Sites for 2018. (2018). Retrieved from https://www.reviews.com/travel-sites/

Ochoa Siguencia, L. (2018). Contemporary Information Technologies In *Business Management* (1-231). Publishing House of the Research and Innovation in Education Institute – Czestochowa.

Schiopu, A.F., Padurean, A.M., Tala, M.L., & Nica, A.M. (2016). The Influence of New Technologies on Tourism Consumption Behavior of the Millennials. *Amfiteatru Economic, 18*(10), 829.

Wagaw, M., & Mulugeta, F. (2018). Integration of ICT and tourism for improved promotion of tourist attractions in Ethiopia. *Applied Informatics, 5*. DOI 10.1186/s40535-018-0053-x.