

Evaluation of automobile museums in Poland and Czechia

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Abstract

The article analyses a selected aspect of automotive tourism defined by the authors as travels whose aim and motivation is visiting places connected with automotive technology and important for its development and history, such as automobile museums, car factories or private collections. The aim of this paper is to assess the condition of automobile museums in Poland and Czechia, including the level of organisation of these institutions and attractiveness of their offer, to which end a point evaluation method was applied. The results are fairly varied, mirroring the problems faced mostly by small, private museums, even if some of them achieved better results than venues managed by local governments. The best overall result was achieved by the Polish Museum of Technology and Transport – Art Depot in Szczecin, and in Czechia it was Škoda Museum. The latter in some aspects can be compared to German Mercedes-Benz Welt, which is believed to be the best representative of a modern museum connected with the topic. Based on the outcomes, it can be stated that the potential of the automotive tourism has been noticed mostly by large automobile manufacturers, which use their history for marketing purposes.

Keywords: automotive industry, automotive tourism, museum, heritage

Introduction

From the beginning of time, human being wanted to move faster and more effortlessly, using carriages pulled by animals or powered by human muscles. Unfortunately, such solutions had their limitations. People developed methods of moving across waters, commonly by boats or ships of different kind. However, in a continuously developing world there was a need for methods of faster travelling on land. The solutions in wind-powered vehicles, based on those applied in sailing vessels, are well known. Many inventors and discoverers made an effort to turn the known traction force into mechanical power, using different kinds of gear wheels or levers [Rostocki 2009]. The invention of steam engine turned out to be a great development, together with its subsequent improvements, such as combustion engines. The first cars aroused curiosity, they were very expensive and widely criticised. Today, however, they are considered extraordinary inventions as they gave rise to great changes in human life. Nowadays, cars are not only a useful means for transporting people, goods and services, they have also become an element

of culture. They have grown to be the most popular mode of transport, and their brands and models might be status symbols of their owner [Cudny 2018].

The development of vehicles is happening right in front of our eyes as we can still use cars created a quarter of a century ago and compare them with the current technology used in modern vehicles. This very tangible aspect brings us significantly closer to the exploration of this topic: it is living history, with us as its participants. The memory of previous solutions creates a certain sentiment towards them, which, in turn, brings automotive development closer to us. Car industry, being an interdisciplinary phenomenon itself and generating a wide spectrum of needs, triggered a revolution in many aspects of the modern world [Möser 2003; Rostocki 2009; Szelichowski 2017]. This great impact on our everyday life makes automotive development a fascinating phenomenon. A great interest in this topic creates the need for its exploration, which means looking for the source of knowledge in different locations. That curiosity, in turn, is the first step towards setting off. Tourism allows for a direct contact with the subject of our interest. Therefore, we willingly visit museums or take part in various events, even in remote parts of the world. Car enthusiasts presented with such an opportunity, will happily visit a factory producing their favourite car model, automobile museum or participate in the events allowing them to meet more people interested in the topic. Automotive tourism – a term suggested by the authors of this paper, describing this kind of tourist migration – may take various forms.

The scope of the term ‘automotive tourism’

It is of key importance to establish how automotive tourism is understood and perceived. Referring to a paper by J. Marak and J. Wyrzykowski [2010], the term ‘car tourism’ (Polish *turystyka samochodowa*) might be mentioned, understood as of the means of transport used by tourists for travelling. A similar understanding is presented by M. Mika [2007] who categorises tourism according to means of transport. A paper by B. Prideaux and D. Carson [2011a] reads that ‘drive tourism’ is understood as travelling using any form of mechanical road passenger transport, excluding coaches and bicycles. The presented views are a direct result of connecting cars with tourism [Hallo, Manning 2009; Kent, Elliott 1995], a situation in which a vehicle becomes an indispensable means to achieve an aim, namely reaching a tourist attraction. They are not focused on the automotive development itself but indicate cars

as one of many ways to travel [Prideaux, Carson 2011b]. In this context, there are analyses of application of new technologies in vehicles, which would not pose danger to the environment, thus including drive tourism in sustainable tourism [Fjelstul, Fyall 2014]. The issue is examined in a similar way by a number of papers on motorcycle tourism, the experiences of its participants being the most frequent subject of analysis [e.g. Cater 2017; Frash, Blose 2019; Frash et al. 2018; Scuttari 2019; Sykes, Kelly 2016; Wu et al. 2019].

For this paper, however, the tourists' interest in automotive industry and development is crucial. So far, the topic was discussed in greatest detail by W. Cudny [2018]. His monography was an outcome of a research project on the development of tourism in spaces connected with the production, use and presentation of cars. The author examined different kinds of automotive tourism spaces which are defined as part of broadly understood tourist space featuring in tourist geography. They were further divided into sub-spaces, such as: multi-function visitor centres, museums, collections and car shows, race rings. The book presents cars and spaces connected with them as tourist resources and products which respond to cognitive needs of tourists. This kind of tourism activity is treated by W. Cudny [2018] as a separate type of tourism, yet it is also called 'car tourism'. The authors of this paper suggest using the term 'automotive tourism' for the type of a journey described by W. Cudny [2018], in order to unequivocally distinguish it from the 'car tourism' as presented in the previous paragraph (the criterion of means of transport). Taking this into account, a definition of automotive tourism has been created for this paper. The term is used to describe the kind of tourism in which travellers' motive and aim is to visit places connected with the automotive technology, important for its development and history. This group of places to visit entails: automobile museums, car factories, private collections, and theme events – mass events, rallies and car races.

Automotive tourism is a form of industrial heritage interpretation. Therefore, it fits into the assumptions of cultural tourism. Cultural tourism is defined as every tourist trip whose main motive is contact with cultural goods, leading to deepening knowledge about them and the entire cultural heritage [Mikos v. Rohrscheidt 2008]. The products of the automotive industry can certainly be considered cultural goods. They refer to both the past and the present (and, above all, they show constant changes in the field of technology), which further confirms the links with cultural tourism. Automotive tourism in the proposed approach shows strong links with industrial and

technical heritage tourism [Jędrysiak 2011; Kaczmarek, Przybyłko 2010; Lisowska 2016; Nitkiewicz-Jankowska 2006; Widawski, Duda-Seifert 2014]. In addition, various forms of automotive tourism are associated with museum tourism [Jęczyński, Sammel 2013], special interest tourism [McKercher, Chan 2005; Trauer 2006; Wen, Wu 2020] and event tourism [Buczkowska 2009; Getz 2007, 2008; McKercher 2002].

The presented kind of tourism has not seen numerous research papers so far [Coles 2008; Cudny, Horňák 2016; Volti 1995; Xie 2006], but the concept is quite common among transport enthusiasts. W. Cudny and J. Jolliffe [2019] analyse this issue from interdisciplinary points of view, namely heritage, marketing and target location management. The importance of automotive tourism in marketing strategy of the leading car manufacturers is indicated [Bonti 2014; Piątkowska 2014]. This current is also inclusive of analyses of tourist lines serviced by historical vehicles [Kołodziejczyk 2019, 2020].

This article focuses on automobile museums, which are often quite well-attended [Kołodziejczyk, Michnicka 2021; cf. Kruczek 2014, 2017, 2019]. The most popular automobile museums can boast a number of visitors comparable or even higher than the commonly known tourist attractions. In 2018, the Museum of Technology and Transport – Art Depot in Szczecin was ninth among the most visited attractions in the West Pomeranian Voivodeship [Kruczek 2019]. However, it should be emphasised that in such venues a large number of visitors are not typical tourists, but residents or same-day visitors [Fyall, Garrod, Leask 2003; Kruczek 2011; Swarbrooke 1995]. With this in mind, the authors decided to use the concept of automotive tourism anyway. At the same time, a survey among visitors to this type of museums [Michnicka, Kołodziejczyk 2021] has shown that a significant proportion (about 2/3) is interested in knowledge about the automotive industry and their motivation was the desire to visit a specific place.

Museums and their performance

Museums constitute an important element in general understanding of cultural tourism [Buczkowska 2008; Mikos v. Rohrscheidt 2008; Richards 1996] and that is why they have become a part of the aforementioned definition of automotive tourism. The museum is thus the destination of a journey, and the customers/recipients/travellers are people interested in the topic, who want to broaden their

knowledge and consciously choose a certain location, because of both education and entertainment [Jęczyżyk, Sammel 2013; Prentice et al. 1998].

Nowadays, effectiveness has become a major issue in the museum management [Plaček et al. 2017]. It is defined as “the ability of a museum to generate values for society according to its mission and goals” [Bertacchini et al. 2018, p. 621; cf. Petrunina 2019]. The way to achieve that depends on various factors, including different stakeholders influencing goals of specific venues [Camarero et al. 2011; Camarero, Garrido 2008]. One of the problems analysed is whether the ownership and organisational models of such institutions may make a difference in terms of their performance. As automobile museums include venues with different legal and ownership status, they potentially enable interesting research in this matter. This approach tries to include the qualitative and social aspects of the cultural services provided by the museum [e.g. Komarac et al. 2020], and not only the quantitative elements, such as the number of visitors or revenues from admissions, as in traditional research [cf. Basso, Funari 2004; Brida et al. 2016; Cellini, Cuccia 2013; Jackson 1988; Taheri, Ansari 2013]. For this purpose museums’ ability to deliver services that enhance the satisfaction of visitors, the development of the local context or perceived impact by stakeholders are being analysed [Bertacchini et al. 2018; Camarero, Garrido 2008; Burton et al. 2009; Kruczek 2011; Plaček et al. 2020]. There are various works showing that the ownership and organisational models influence the performance of museums to a large degree [e.g. Plaček et al. 2020].

Museum tourism, and thus also museums, is one of the foundations for the development of the tourism sector [Buczowska 2008]. It can stimulate development in non-economic terms to a much greater extent than nature tourism, which primarily brings financial benefits [Jęczyżyk, Sammel 2013]. This non-economic impact is expressed i.a. in increasing the awareness of the cultural affiliation among the local community [Petrunina 2019] and the development of cultural awareness among visitors. The advantage of museum tourism is also the lower seasonality – the exhibits may be available to visitors all year round, regardless of the weather. Tourist assets that are used to create an offer of museum tourism are related to the local community, therefore the activities undertaken to create a product of this tourism are locally based [Jęczyżyk, Sammel 2013].

Mercedes-Benz Welt as an ideal automobile museum

The development of automotive technology in Germany began very early on and is connected mainly with Gottlieb Daimler and Karl Benz [Rostocki 2009] who, independently of each other, built high-speed engines in the 1880s, laying foundations for one of the largest contemporary automobile companies. Numerous factors have influenced the success of the German car market. In the 1920s the companies of Daimler and Benz merged, and one of the biggest American companies, General Motors, entered the German market, having bought out the shares of a German company Opel. The German car market was strongly inspired by Henry Ford's production and sales methods. In the 1930s, the Nazi authorities tried to produce a cheap car for the masses, namely a Volkswagen. Designed by Ferdinand Porsche, after the Second World War it became a separate brand gaining incredible popularity thanks to its reasonable price and new models, which completely fulfilled the needs at the time [Rae, Binder 2018]. Over the years, the concern strengthened its position on the market and is nowadays one of the leaders of the automotive industry [JATO 2019; Wagner 2020].

As we can see, German automotive market has had good development conditions from the very beginning, and thanks to Daimler's story it became a cradle of automotive technology. All these aspects contribute to the fact that automobile museums in Germany excel in quality and the presented content. The venues are usually very modern and their presentation of the theme of automotive technology is at the highest level. The spacious interiors and appropriate tools allow the tourist to learn about the theme in the most accessible way. Comparing to most venues in Poland or Czechia, presented below, they show a completely different attitude to the museum exhibits, starting with carefully planned architecture of the buildings, through the selection of exhibits, to the ways of presenting the content. The Mercedes-Benz Welt museum in Stuttgart (Figure 1) is particularly remarkable [Heidbrink 2010]. Coherently designed, it becomes a universal venue, meeting the needs of everyone interested, regardless of age group. It is also interesting that two large venues are located in the same city – Mercedes-Benz Museum and the Porsche Museum. They are not, however, a serious competition for each other. The fans of a specific company are likely to visit only one museum, but more general automotive technology enthusiasts will surely benefit from the fact that two such museums are located so close to each other and pay a visit to both [Pokojska 2014].

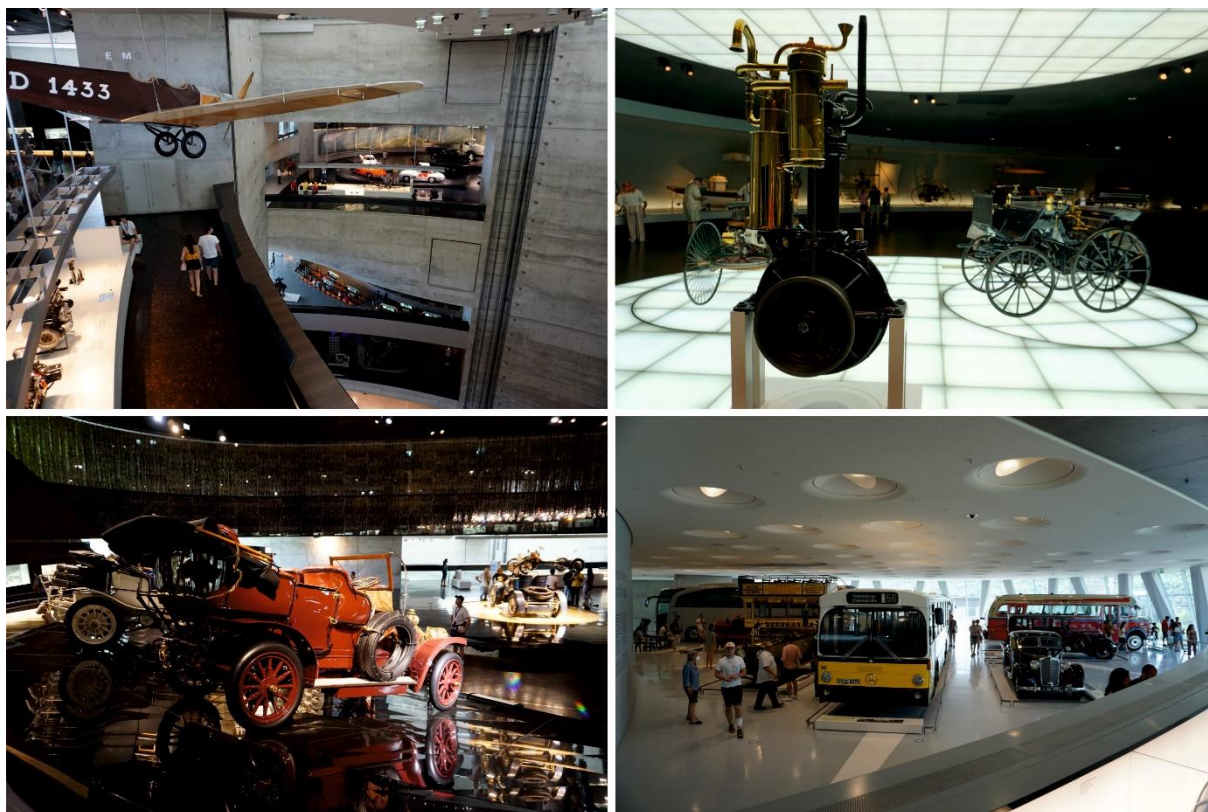


Figure 1. Selected interiors of the Mercedes-Benz Welt museum in Stuttgart

Source: photos by the authors

The Mercedes-Benz Welt museum possesses as many as 1 500 artefacts (including 160 vehicles). They belong to various categories, from cars and motorcycles, to trucks, public transport vehicles, etc. Among special vehicles, there are objects such as a motorcycle belonging to Daimler himself or vehicles significant for pop-culture. Other exhibits include many devices designed by Daimler, e.g. a fire engine pump, motorboat and locomotive. The museum possesses an extensive and diverse collection which was carefully planned in order to demonstrate the history of the brand in the best possible way. Everything is presented in the chronological order, so that the visitor has a chance to have a closer look at each period and gradually move from the beginnings of Benz's and Daimler's production in 1880s up to the modern times [Rostocki 2009]. The museum presents the 135 years of creating vehicles by the brand in a truly interesting way, showing how past events influence the present and the further development of the automotive technology.

It can be stated that the Mercedes-Benz Welt museum is a perfect example of an automobile museum [Pokojska 2014]. The activity of the venue is strongly connected with the identity and image of the concern. The museum meets the criteria for a perfect display thanks to an appropriate organisation of the interior, well-planned

visiting routes, carefully selected exhibits and their modern presentation. The aim is for the message to be adjusted to the abilities of every visitor, regardless their physical disabilities or age. The building that houses the museum was carefully designed not only to meet all the above demands but also to constitute an architectural value itself. On the other hand, these are features guaranteed by the status of a factory museum connected with an international concern. Marketing is essential here and the museum is part of a strategy aimed at convincing visitors of the significance of the brand [Piątkowska 2014; Pokojńska 2014].

Aims, materials and methods

In the context of this paper, broadly understood automotive development is perceived as part of cultural heritage, and museums seem to be the best tool to gather and protect the relevant artefacts. As part of automotive tourism, they play a special role because they have a form which tourists are familiar with and that, in turn, makes them be chosen more willingly as a purpose of a tourist trip. As written above, the state of research on automotive tourism is insufficient, and research on this topic has only appeared in recent years. For this reasons, it was decided to take a closer look at the state of automobile museums, taking into account they are most permanent (in terms of the availability of the offer) aspect of automotive tourism. The aim of the article is to examine and evaluate the condition of automobile museums in Poland and Czechia, based on their current offer. For this purpose, facilities were inventoried, and then assessed and compared. There has been no such comprehensive assessment of automobile museums in the region so far. Although the largest and most famous venues were included in various analyses [e.g. Cudny 2018], smaller institutions were omitted. And it should be emphasised that the latter are of great importance for domestic tourism and the functioning of local community (e.g. as a unifying factor), although in some cases they may also be interesting for foreign tourists (e.g. museums located near large tourist centres that may become a complementary element for the basic offer). For these reasons, the greatest added value of the work should be the inclusion of a larger number of automobile museums of various size from the region. On the basis of their comparison, it became possible to indicate problems faced by the institutions.

Taking into account the rich automotive history with no single centre of development, it is necessary to present factors which became significant

in denominating the research area for this paper. Although Poland is characterised by a rather low level of car industry development, both previously and nowadays [Domański et al. 2013; Guzik et al. 2020; Szelichowski 2018], it was included in the analysis as the country of origin of the authors. It was decided to compare the results for Poland with another country in Central Europe, choosing Czechia as a country with significant automotive traditions. In Czechia, already in the mid-19th century, the basis for car industry development was strong industrialisation resulting from the Austrian influences. It is when the brands such as Tatra, Laurin & Klement, Škoda or Praga appeared [Rostocki 2009]. The car industry belonged to the fastest-developing in Austria-Hungary, which was indispensable for the development of the national market [Blasi 2014]. After the First World War and after creating Czechoslovakia, the country had the economic heritage left by foreign influences at its disposal. The situation for the development of certain brands (e.g. Tatra, Praga) changed substantially after the Second World War. They became recognisable mainly in the countries connected with the Eastern Bloc (communist). What is more, life behind the 'Iron Curtain' significantly hindered their development and limited their international popularity [Margolius, Henry 2015]. It must be noted, though, that thanks to its history, Czech industry was the most advanced out of the countries belonging to the Council for Mutual Economic Assistance. Škoda was bought by Volkswagen concern in April 1991 and the Czech car industry lived its renaissance.

In order to find venues which popularise knowledge about automotive technology, an inventory of museums and private collections in Poland and Czechia as of 2019 was compiled (Figure 2). Their choice is relevant for the definition of automotive tourism proposed in this paper. Subsequently, an assessment of the venues was carried out, complete with their level of organisational advancement, the range of their offer and services. In order to achieve that, a custom-designed point system was applied (Table 1). The authors tried to gain the fullest possible picture of what automobile museums offer and how they function. The criteria included in the analysis were selected on the basis of the authors' own experience as recipients of the museum offer and automotive tourism participants, as well as using indications of the existing literature in the field of museum functioning and evaluation [e.g. Basso, Funari 2004; Pokojaska 2014; Taheri, Ansari 2013]. An important aspect of the selection of criteria was the availability of information and an attempt to objectify the assessment, hence the focus was on measurable factors. The sources

used in the analysis consisted of the official websites of the institutions and other available internet resources referring to the venues, along with field studies, all taking place in the first half of 2019. Additionally, questionnaires were e-mailed to all the analysed museums in order to establish additional details which are not public¹. The results of the point evaluation were used to appropriately describe the museums' condition (Table 2).



Figure 2. Location of the analysed automobile museums

Source: own elaboration based on the compiled inventory

¹ It must be emphasised that out of 32 analysed venues, only four replied (Gdynia Automobile Museum, Volkswagen Museum in Pępowo, Museum of Technology and Transport – Art Depot in Szczecin and Tatra Museum in Kopřivnice).

Table 1. Criteria and point system in the evaluation of automobile museums

Criterion	Points awarded to each museum for each criterion				
	0 pts	1 pt	2 pts	3 pts	4 pts
1. Number of exhibits	no information or no exhibits	1–25	26–75	76–200	more than 200
2. Variety of exhibits	no information or one type	two types	three types	four types	five and six types
3. Form of museum	no information or undefined legal situation	collection as part of museum with a different theme	separate automobile museum	-	-
4. Part of an official cultural tourist route	no	yes	-	-	-
5. Opening time per year	only available on request	seasonal	all year round	-	-
6. Website ^{a)}	none	static website	good quality, regularly updated website	-	-
7. Directions to the facility	just the name posted on the museum	signposts in the vicinity of the museum (up to 1 km)	signposts also further from the museum (more than 1 km)	-	-
8. Availability of secondary infrastructure (e.g. souvenir shop, restaurant, hotel, conference room)	no information or no facilities	one facility	two or three facilities	four facilities	more than four facilities
9. Availability of basic services	no information or no services	b)	-	-	-
10. Availability of additional services	no information or no services	c)	-	-	-
11. Price of an adult ticket	no information	over 30 PLN	20–29 PLN	10–19 PLN	less than 10 PLN
12. Cooperation with other tourist attractions (e.g. joint promotion, mutual advertising, leaflets)	no	yes			

Note: ^{a)} An extra point was awarded for an active social media account.

^{b)} 0.5 point was awarded for each the following services: designated sightseeing route in the facility, descriptions of exhibits, guidebook and interactive exhibition, up to 1.5 points; 1 point was awarded for each of the following services: a guide, educational initiatives, full access to the exhibits, temporary exhibitions, special events and the possibility to visit an active car factory, up to 5 points.

^{c)} 0.5 point was awarded for the availability of each of the following services: organising private events, loaning exhibits, renting museum rooms and special visits, up to 2 points.

Source: own elaboration

Table 2. Condition according to the total points gained in the assessment of automobile museums

Total points	Condition	Colour in point evaluation tables
0–7 pts	insufficient	
7.5–14 pts	basic	
14.5–21 pts	moderately good	
21.5–28 pts	good	
28.5–35.5 pts	very good	

Source: own elaboration

Fairly large discrepancies in the number of exhibits (criterion no. 1) between museums may result from different calculation methods. Some venues may provide the total number of exhibits they possess while others may only include those on display. Differences may also result from taking into account only the vehicles or their individual components presented at the exhibition. Value must therefore be treated as an estimate. Diversity of the exhibits (criterion no. 2) was determined taking into account the following types: 1) motorcycles, 2) cars, 3) trucks, 4) special vehicles (military, agricultural, special services, of non-automotive historical value – e.g. car belonging to famous people), 5) public transport, 6) other exhibits, e.g. carriages, engines, photographs. Hence, in a given museum – in accordance with the adopted method – a maximum of six types of exhibits may be displayed.

For point evaluation, a good quality and regularly updated website (criterion no. 6) was understood as a site containing all the necessary and updated information, such as opening hours, ticket prices and practical information. What is more, if the website had a tab informing of events happening at the museum, this information should be up-to-date. Social media accounts were also examined, especially Facebook profiles and Instagram accounts, both very popular nowadays. An active account was understood as one where posts appear regularly, at least once a month. The analysis also included ticket prices. It is true that cheaper tickets may mean a lower level of offer, but for a large number of tourists the price is important and they prefer cheaper attractions. Only full-price tickets were taken into account (criterion no. 11) because this kind of ticket is offered by every venue and it always belongs to the same category, namely a ticket sold to people without any right to a discount. For Czechia, a calculation from the Czech crowns took place, which was aimed at making the prices comparable. The following rates were accepted: 1 CZK – 0.1674 PLN (4th May 2020), according to the table of average exchange rates no. 085/A/NBP/20 of National Bank of Poland. Other elements included in the analysis were i.a. opening time, directions

to the museum, cooperation with other tourist attractions, but first of all availability of various services and infrastructure (Table 1).

The analysis entails all the venues which could be found on the Internet (Figure 2). This condition results not only from the fact that it is one of the most popular ways of gaining knowledge, commonly used by tourists to plan their journeys. At the same time, it guarantees that all the information collected by the authors are available for tourists and do not exceed the most popular actions undertaken by visitors. The compiled inventory shows the availability of information on tourist products and examines the cases of locations which try to reach potential visitors using the most popular promotion tools. During the Internet search of automobile museums, the following phrases were used as keywords: automotive museum, auto museum, vehicle museum, automobile museum, and for Czechia also “muzeum veteránů” and “veterán museum”, which are commonly used to identify the analysed venues in this country (Czech “veteran” meaning ‘heritage car’).

Automobile museums’ assessment

The point evaluation allowed to decide which facilities demonstrate the highest level of the offer and might be most attractive to tourists. In the subsequent analysis, the attention was paid not only to the best museums but also to those which gained the worst results. The conditions for the obtained results were also discussed.

Poland

As a result of the evaluation, thirteen automobile museums in Poland (Figures 2 and 3) gained the result from 6 to 31.5 points (Table 3, Figure 4). The Museum of Technology and Transport – Art Depot in Szczecin was awarded the highest number of points and was categorised as having a very good level of the offer. In total, the location can boast as many as 14 112 exhibits, however, this includes various types of objects, not just vehicles, because it is not only an automobile museum. Moreover, not every item is on display. The museum in Szczecin owns all types of exhibits specified by the authors. The questionnaire allowed for highlighting the most interesting exhibits – a collection of seven Stoeper cars coming from a factory in pre-war Szczecin was indicated. They had been restored and fully brought back to their original working condition. In the analysed venue, the automotive section is a part of a museum with a broader theme. It must be noted, however, that the museum’s aim is education regarding technology and transport, which means that

vehicles play an important role in the exhibition as a whole. A reference must be made to the history of the venue situated in a former tram depot Niemierzyn, which indicates a significant transportation focus (Figure 5). The museum in Szczecin has a modern, regularly updated website which is clear and easy to navigate. It helps find all the necessary information and presents the content such as the history of the venue, descriptions of exhibitions and the remaining offer, as well as events taking place. An additional advantage is having several language options, which significantly widens potential target group. The place is also active in social media (Facebook profile).

Table 3. Distribution of points by category for automobile museums in Poland

Museum	Criterion 1	Criterion 2	Criterion 3	Criterion 4	Criterion 5	Criterion 6	Criterion 7	Criterion 8	Criterion 9	Criterion 10	Criterion 11	Criterion 12
Automobile and Technology Museum, Białystok	0	4	2	0	1	1	1	0	0	0	4	0
Automobile Museum, Bielsko-Biała	0	1	2	0	2	0	0	0	1.5	0	4	0
Automobile and Technology Gallery, Bytom	2	3	2	0	2	1	0	0	1.5	0	4	0
Gdynia Automobile Museum, Gdynia	4	3	2	0	2	1	1	1	3.5	0.5	3	1
Auto-Museum Jan & Maciej Peda, Gostyń	1	2	2	0	0	1	0	0	1.5	0.5	0	0
Museum Chamber of Automotive Industry, Krosno	3	2	0	0	0	1	0	0	0	0	0	0
Automobile Museum, Nieborów	0	4	2	0	1	1	2	3	2.5	1	3	1
Private Museum of Automotive Industry and Technology, Otrębusy	4	4	2	1	2	2	2	2	1.5	2	2	1
Volkswagen Museum, Pępowo	2	4	2	0	2	1	2	2	4	2	3	1
Private Museum of Military and Historical Vehicles, Rakszawa	3	3	2	0	0	1	0	0	0	0.5	0	0
Museum of Technology and Transport – Art Depot, Szczecin	4	4	1	1	2	3	2	2	6.5	2	3	1
Topacz Automobile Museum, Ślęza	4	3	2	1	2	3	2	4	3.5	2	3	1
Automobile and Military Museum, Tanowo	3	4	2	0	0	1	0	0	0	0	0	0
<i>Max. points for the given criterion</i>	<i>4</i>	<i>4</i>	<i>2</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>2</i>	<i>4</i>	<i>6.5</i>	<i>2</i>	<i>4</i>	<i>1</i>

Source: own elaboration

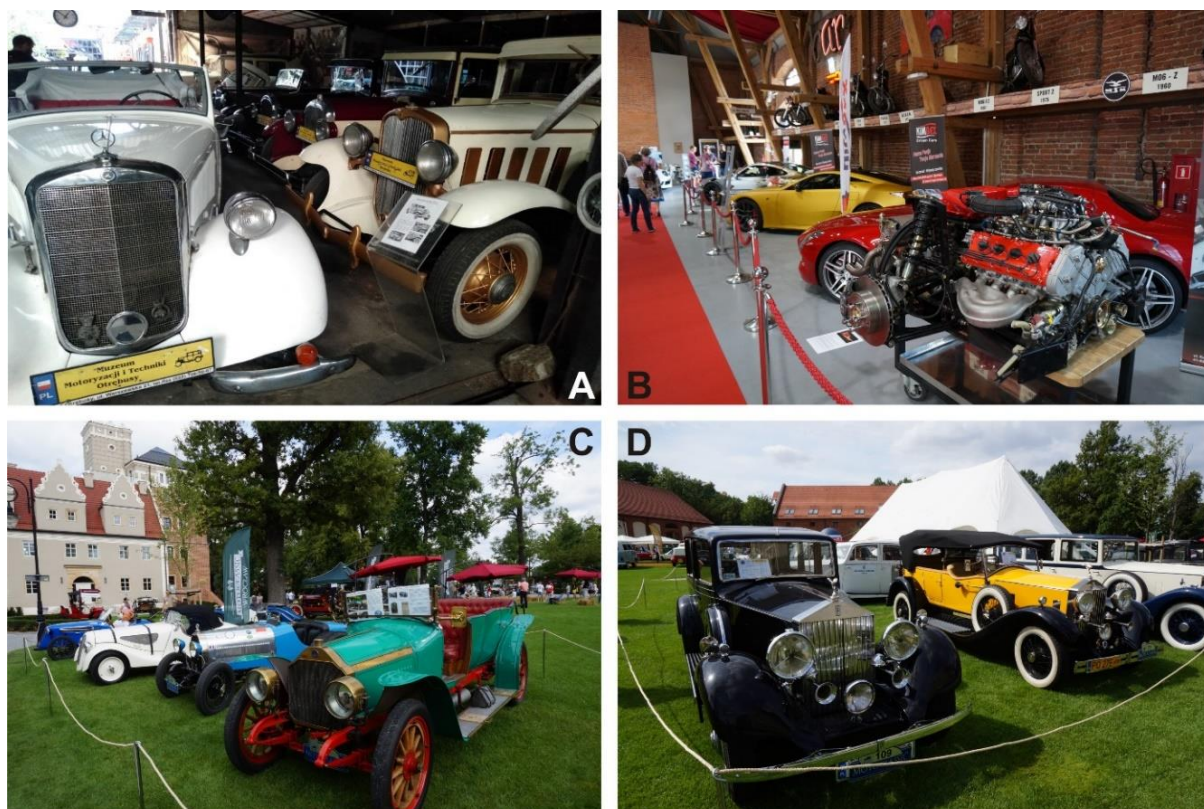


Figure 3. Chosen automobile museums and collections in Poland: A. Private Museum of Automotive Industry and Technology in Otrębusy (the problem of the venue is lack of space, exhibits put too close to each other and bad condition of some of the exhibits); B. Topacz Automobile Museum in Ślęza (the exhibition is organised in a modern way, the vehicles are exhibited well but the access to at least some of them is limited); C and D. MotoClassic Wrocław in Ślęza (an annual event which is a rally of historical and modern vehicles, promoting Topacz Automobile Museum)

Source: photos by the authors

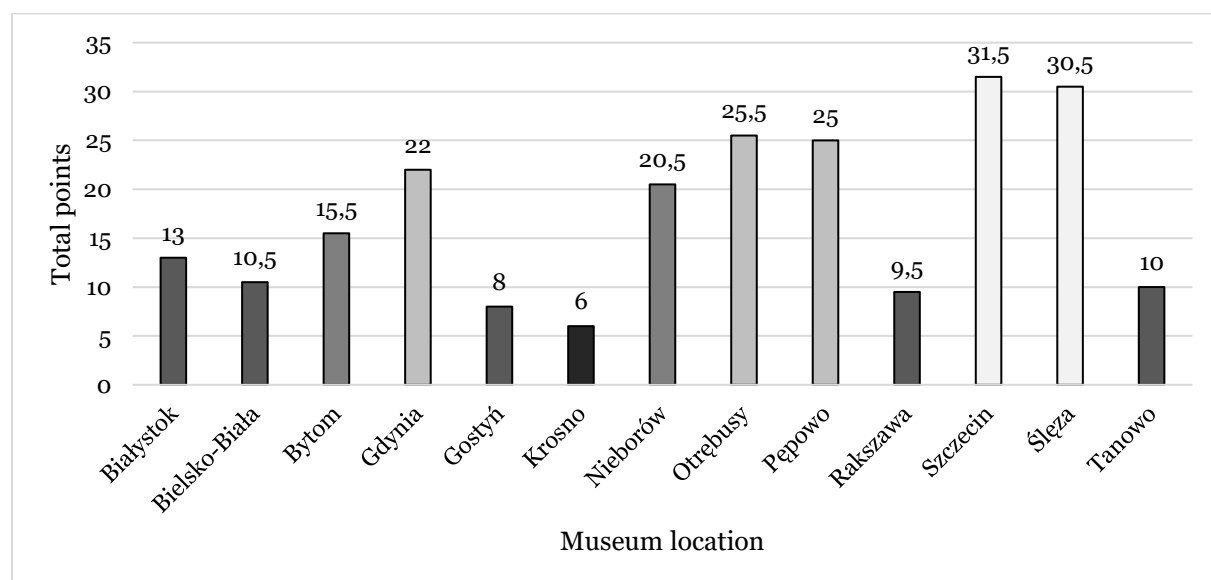


Figure 4. Total points gained by automobile museums in Poland

Source: own elaboration



Figure 5. The former parking hall of the Niemierzyn tram depot and the new building hosting the Museum of Technology and Transport – Art Depot in Szczecin

Source: photo by the authors

The Art Depot in Szczecin gained the maximum number of points both for the accessibility of the infrastructure as well as for basic and additional services. It must be emphasised that it is an important issue from the point of view of the venue's functioning. All indispensable elements, such as descriptions of the exhibits or a guide, are ensured. Full access to the exhibits or an interactive section are additional advantages allowing for a better understanding of the presented theme and building positive emotions among the visitors through engaging them in a more direct contact. Temporary exhibitions and museum events widen the scope of the offer, ensuring extraordinary entertainment, arousing more interest or advertising the place through cooperation with other entities. These may become a reason for the tourists to return to the venue. In the museum in Szczecin, temporary exhibitions are e.g. works of the students of Academy of Fine Arts, and the events include classic cars rally or model-making exhibition. Additional services widen the offer for both individual visitors and companies so it is important that there are facilities allowing for the organisation of family meetings or renting spaces. In the analysed venue there is also an option to loan the exhibits or to organise guided tours for groups. The museum in Szczecin makes three other facilities available for tourists: a souvenir shop, a café and an educational room. The fact that the museum is trying to meet also very basic needs, such as the possibility to buy beverages, will always be highly appreciated

by the visitors. Additionally, tourists usually willingly purchase souvenirs. Such actions help build memories which are a very important element of travelling.

The lowest number of points, only six, was awarded to a museum in Krosno (Museum Chamber of Automotive Technology) so its offer can be assessed as insufficient. It is the only Polish venue in the lowest category according to table 2. In the case of this museum, most information is unavailable, which adversely influences the perception of the venue and surely does not encourage visiting the place. Additionally, it only has a static website, which outlines the history of creating the museum and provides a very general description of the exhibits. However, it is important that the museum is affiliated with a local school, which clearly changes its character and expectations, influencing also its activity. Such a venue could, of course, function very well and become popular but this particular museum is a kind of a local curiosity, aimed mostly at presenting students' works and not at promoting educational values of automotive technology among wider public.

Apart from these two extreme cases, museums with the offer at the basic level are most common (Table 3, Figure 4), such as the venues in Białystok, Bielsko-Biała, Gostyń, Rakszawa and Tanowo. There is also a group of venues at a moderately good level (Bytom, Nieborów) and at a good level (Gdynia, Otrębusy, Pępowo), while the Topacz Automobile Museum in Śląza received only one point less than the venue in Szczecin which allows it to be classified into the category of a very good level of the offer. As a consequence, there are five Polish venues in the two best categories. They possess a high number and variety of exhibits, and provide a wide offer and additional services. Most of them (exceptions being Gdynia and Pępowo) have good online marketing which gives them an opportunity to reach a greater number of people. On the other hand, even a static website (Pępowo) does not necessarily have to be an obstacle, provided that all the necessary information about the venue are available. These venues demonstrate the fact that automobile museums in Poland, despite a shorter history of the local automotive technology and its limited development, may function well, both as private venues (e.g. Automobile Museum Topacz) and with support from local authorities (e.g. Museum of Technology and Transport in Szczecin). The Museum of Automotive Industry and Technology in Otrębusy demonstrates problems faced by private venues, which mostly means limited funds. However, Volkswagen Museum in Pępowo shows that combining

museum and hotel may positively influence the functioning of the venue and works well for private sector.

Based on these results, it can be said that automobile museums in Poland function relatively well. The average number of points gained in the assessment for all the venues was 17.5 which corresponds to moderately good level of the offer. The venues face fairly similar problems, the first being online promotion. Most venues are represented by static, non-updated websites, which sometimes lack even basic information. This may result in lower levels of trust and interest among tourists. Another issue is bad maintenance and insufficient level of basic services, which often coincide. Only few venues have interactive appliances, which makes them perceived as modern. Only in some cases there are complementary or additional facilities, usually reduced to the descriptions of the collections or availability of a guide. The level of cooperation with other tourist attractions is really low, which also applies to participation in official cultural tourist routes. Clearly positive aspects entail a variety of exhibits, legal stability of the venues, and ticket price. Automobile museums in Poland have great potential, often having numerous exhibits at their disposal, which may make them very interesting and attractive not only for automobile aficionados but also for people searching entertainment or memories. Including everyday objects and various technological devices in the collection helps create the atmosphere of the period. Automobile museums in Poland focus on a theme popular in society, providing education and time well-spent for the visitors at a reasonable price.

Czechia

Point evaluation of Czech automobile museums revealed that they are characterised mostly by moderately good level of the offer – as many as 10 out of 16 facilities (Table 4, Figure 6). Only one venue can boast very good organisation, two more institutions – a good level. None of them, however, belongs to groups with insufficient level of the offer. There is, thus, less diversity between the venues, compared to Poland.

The museum which was awarded the highest total number of points is Škoda Museum in Mladá Boleslav. It is the only museum in Czechia with the offer at a very good level. The venue claims to possess 340 exhibits in four categories: motorcycles, cars, special vehicles and others. Because of the ownership (Škoda Auto concern) and

the theme of the venue, all the vehicles presented there are Škoda. It is thus surprising that there are no cargo or public transport vehicles in the museum. According to the official website, the company produced such vehicles, e.g. Škoda trucks 306, 404, 706 series or bus models 606 DN, 706 RTO. This aspect adversely influences the evaluation of the venue, both for this analysis and, undoubtedly, for a great part of visitors. Criteria no. 8, 9 and 10 proved that Škoda Museum has a wide range of facilities. Tourists can eat at a restaurant or pay a visit to a souvenir shop, there is also a conference room. The availability of basic facilities, including descriptions of the exhibits, interactive elements, multi-lingual guide, educational classes and museum events, is good. Hence, the tourists are certain to have excellent visiting conditions of the venue which is very modern in its formula. An extra service which was not included in the point evaluation is the possibility of visiting the Škoda Auto factory, which is located in the town. The most important negative aspect is that the venue does not have their own social networking profile. There are only some references to it on the official Czech Škoda Auto Facebook profile. It must be emphasised that Škoda is in itself a recognisable brand which works on its advertising through active production of new vehicles, continuously creating its history.

Table 4. Distribution of points by category for automobile museums in Czechia

Museum	Criterion 1	Criterion 2	Criterion 3	Criterion 4	Criterion 5	Criterion 6	Criterion 7	Criterion 8	Criterion 9	Criterion 10	Criterion 11	Criterion 12
Auto Moto Veterán Museum, Česká Ves	0	2	2	0	1	0	2	1	1.5	0.5	0	1
Moto Auto Museum – Oldtimer, Kopřivnice	0	3	2	1	2	3	2	2	0.5	0.5	3	1
Tatra Technology Museum, Kopřivnice	3	3	0	1	2	3	2	3	3	1.5	2	1
Motorcycles Museum, Křivoklát	3	1	2	0	1	1	2	0	0.5	0	0	1
Sports Car Museum, Lány	3	2	2	0	2	1	1	2	1.5	0	3	1
Motorcycles Museum, Lesná	0	2	2	0	1	1	2	3	0.5	0.5	3	1
Automuzeum Liberec, Liberec – Vratislavice nad Nisou	0	4	2	0	1	3	1	0	2.5	0.5	3	1
JK CLASSICS Museum of American vintage cars, Lužná	2	3	2	0	1	3	2	1	1.5	0.5	2	1
Škoda Museum, Mladá Boleslav	4	3	2	1	2	2	2	2	6.5	1	3	1
Veteran Arena, Olomouc	3	3	2	0	1	3	2	1	1.5	0.5	1	1
Motol Trabant Museum, Prague	0	3	2	0	2	2	1	0	2.5	0	3	1
Retro Auto Museum, Strnadice	4	4	2	0	1	3	2	1	1.5	0	3	1
Technology Museum, Telč	0	2	2	0	1	1	1	0	3.5	0	3	1

Museum	Criterion 1	Criterion 2	Criterion 3	Criterion 4	Criterion 5	Criterion 6	Criterion 7	Criterion 8	Criterion 9	Criterion 10	Criterion 11	Criterion 12
Automuzeum Terezín, Terezín	2	4	2	0	2	0	2	1	1	0	3	1
Czech Car Bodywork Museum (Czech: Muzeum karosarství), Vysoké Mýto	0	2	2	1	2	2	2	0	3.5	0	3	1
Automobile Museum, Znojmo	0	3	2	0	2	1	1	0	1	0	3	1
Maximum points per criterion	4	4	2	1	2	3	2	4	6.5	2	4	1

Source: own elaboration

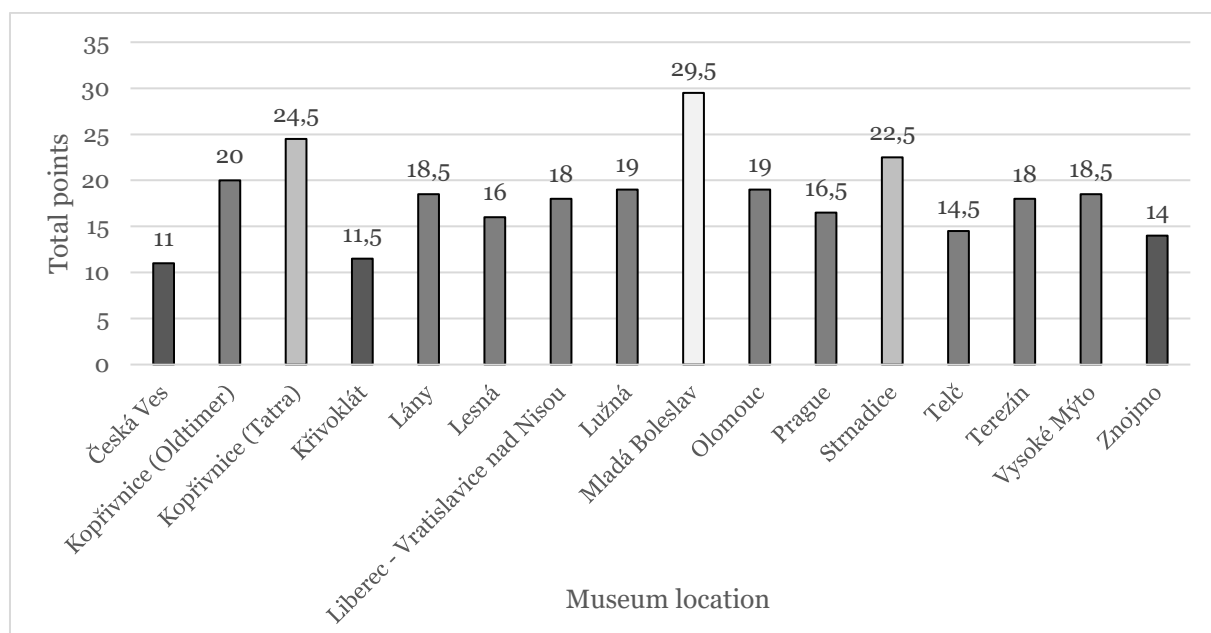


Figure 6. Total points gained by automobile museums in Czechia

Source: own elaboration

The museum with the lowest number of points in the ranking was Auto Moto Veterán Museum in Česká Ves, which gained seven points and as such, it qualifies to the group of venues with only just sufficient offer. The aspect which influenced the evaluation was lack of available information for tourists. The only reference to its existence is on the official website of the automobile club which created it. There is no well-prepared part dedicated exclusively to the museum, which results in scarcity of information. There are no data on the number of vehicles, and the diversity could be determined only thanks to a few references and photographs posted on the club's website. What is more, on the website there is no information about ticket price or even an exact address. All of the above may not win potential visitors' trust and it is likely to discourage people from travelling there. While visit, tourists can find out about

exhibits by reading their descriptions. The venue organises small museum events, usually automobile rallies or meetings for classic vehicles' enthusiasts.



Figure 7. Selected automobile museums in Czechia: A. Motorcycle Museum in Křivoklát (the venue is badly signposted, located outside main tourist routes, the building does not encourage visiting); B. Sports Car Museum in Lány (the problem of the venue is insufficient exhibition space); C. Motorcycle Museum in Lesná (the museum benefits from its location on a popular tourist route leading to a national park); D. Automobile Museum in Znojmo (despite limited space, the exhibition is arranged in an interesting way)

Source: photos by the authors

The most numerous group of the Czech automobile museums (Table 4, Figures 6 and 7) are those at a moderately good level of their offer (one of two museums in Kopřivnice, Lány, Lesná, Liberec, Lužná, Olomouc, Prague, Telč, Terezín, Vysoké Mýto). There are only three objects at the basic level (the aforementioned Česká Ves, Křivoklat, Znojmo), while in Poland there were five out of 13. In case of two museums (second one in Kopřivnice, Strnadice) the offer can be classified as good (in Poland there is one more venue in this category). An average result of evaluation of the analysed Czech venues is 18.2 points, which places them in the category of a moderately good level, just like Polish venues. The analysed museums turned out to be marginally better, which resulted from signposting and relatively high level of cooperation between attractions. Moreover, the venues are characterised by quite a high number of exhibits and satisfactory diversity. Their online promotion is well-

though out and regularly updated. Element lowering the rating is the insufficient provision of services and problems connected with organisation, both resulting from the proprietary conditions and limited funds (Figure 7A and B). Nevertheless, just like in Poland, there are private venues which work better than those created on regional government's initiative, e.g. private Retro Auto Museum in Strnadice versus self-governmental Czech Car Bodywork Museum in Vysoké Mýto. It is important that theme museums can be found in Czechia more often than in Poland, the most popular exhibits being those connected with the local production. It can be concluded that the Czechs have both a good basis for organising such places, and a very important part of automotive technology to present. Because of that, there are more automobile museums within the Czech territory than in Poland.

Discussion and directions for the development of automobile museums

It can be stated that there are no museums in Poland similar to German Mercedes-Benz Welt, while in Czechia there is – in some sense – Škoda Museum, currently belonging to a German company. The remaining museums are mostly private collections and usually do not possess all the elements of a modern museum. The Museum of Technology and Transport in Szczecin should be highlighted. It gained the highest number of points out of all the analysed museums, the result influenced by a wide array of basic and additional services, together with a relatively low ticket price. When it comes to the number and diversity of the exhibits it is comparable to the Mercedes-Benz Welt museum. The Szczecin venue applies only some modern solutions but the exhibition is carefully selected and well presented. It can be stated that this is exactly how local museums should function in order to best present their theme, to fulfil their educational function and year after year to attract an increasing number of visitors [cf. Kołodziejczyk, Michnicka 2021]. An important issue, however, is the fact that the museum was created with the help of the municipal authorities. Having said that, many other analysed examples (Otrębusy, Pępowo, Strnadice, Ślęża) proved that it is possible for private museums to function well if enough attention is paid to at least basic services and organisation. Thus, it is not true that only venues with generous budgets, public or owned by big automotive concerns, can be well perceived and receive favourable opinions from the visitors.

The topic is connected with ownership and organisation structure of museums in general [Bertacchini et al. 2018]. They are usually either private, public or run

by non-profit organisations, however venues owned by international concerns complicate this classification. The latter provide the brand with appropriate promotion, build its recognition and reputation in the society [Piątkowska 2014]. In this way, they can contribute to the growth of car sales. Another issue is that museums of large car concerns are highly popular, which may have an impact on the company's financial result. Taking this into account, it is worth dividing museums in terms of ownership – state, local government, private persons, associations and other non-profit organisations, and companies [cf. Plaček et al. 2020]. While the first three categories are the most numerous, few company museums can represent the highest level, as evidenced by the specific – after all – category of automobile museums. The level of company museums depends on the financial situation of the industry [e.g. Folga-Januszewska 2009]. In the case of industries that are experiencing a crisis and restructuring is necessary, museums or so called chambers of tradition are closed or are in a state of vegetation (e.g. the unique Distillery Museum in Łańcut, Poland, which has been closed for two years). In case of car companies the opposite is usually the case. As the above analysis shows, the level of local government and private museums can be really varied – organisational matters are of key importance, not ownership. Although the former usually have larger funds at their disposal, a private museum providing an attractive offer (which is not difficult in the case of the automotive heritage) and having proper management and promotion may be rated higher than many local government museums, which is also proven by examples from Italy [cf. Bertacchini et al. 2018].

Currently, looking at the number of automobile museums, private people who try to take care of this heritage themselves play a key role in the process. Unfortunately, it is not always possible for them to ensure an appropriate level of the exhibition. Deterioration of the objects is noticeable, as even those which enjoyed great popularity several years ago, nowadays lose their value (e.g. Otrębusy or Lesná). However, compared to a carefully created product, such as Mercedes-Benz Welt, the authors would like to point out an important advantage of the smaller, private museums from Poland and Czechia. Their owners, apart from financial resources, need enormous passion and determination to start and run this sort of place. Their knowledge of and affection towards vehicles greatly influence the visitors' perception of the venues because even when we visit a small museum, with only the descriptions of the exhibits and the owner as a guide, we can gain more from such a journey, emotionally and

educationally, than from visiting an impressive museum with the latest technological solutions and offering a carefully designed image for 'consumption'.

Private automobile museums can develop both very well or poorly. If the owner has the ambition to create an attractive venue that meets the needs of tourists, he/she can create an offer better than museums run by a local government. On the other hand, if the purpose is primarily to collect vehicles, the offer may be poor and the museum will not advertise much. Similar dependencies may also appear in the case of local government museums or places run by motor clubs, which display private vehicles (e.g. owned by club members). The attitude of these people to the functioning of the museum will certainly affect the scope of the offer and the scale of promotion.

Diversity of exhibits is an important feature for automobile museums. If a brand does not have many categories of vehicles, it becomes important to complete the exhibition with a different kind of content. An exhibition might include designs and technical drawings of vehicles, production machines or equipment connected with servicing, among other things. The great number of exhibits in the Mercedes-Benz Museum results from the long history of the brand, compared to all the other museums analysed in this paper, and from the way of presenting the history of the producer. However, it must be noted that if an exhibition is dedicated exclusively to a specific brand, the number of potential objects on display might be limited. It is not the case in the Mercedes-Benz Welt (as mentioned before – 160 vehicles and 1 500 exhibits in total), but in some venues it might be a problem. In comparison, in the Czech Tatra Museum, there are 100 exhibits. It can be stated that such a number is sufficient in order to present the brand but we also need to remember that it is essential not only to present the vehicles but also the history of a certain producer.

Automobile museums, similarly to other contemporary museums, must offer diverse experiences, use various tools to shape the perception of the presented content, also influencing emotions of a visitor [Günay 2012; Janus 2015; Laskowska 1996; Morgan, MacDonald 2020; Nowacki, Kruczek 2021]. The ways of presenting exhibits and museum educational initiatives evolve with advancing technological development, changing people's perception of the world. That is why the presented content must be labelled and described in an appropriate way in order to meet visitors' requirements. A venue wishing to attract the visitors and to efficiently compete with other museums, must offer extra experiences (e.g. a ride in a vintage car or bus).

Furthermore, making additional facilities, such as souvenir shops, a café or restaurant available, it becomes a place of consumption [Banaszkiewicz 2011]. Another important element is a well-designed website containing not only a set of basic information, but also allowing to visit the place virtually. Digitalisation and virtualisation of the museums pose new challenges but also give new possibilities [Evrard, Krebs 2017; Liu, Lan 2021]. A well-organised exhibition, full accessibility to all the most detailed information, visitor-friendly interiors and helpful staff all contribute to the success of a modern museum [Cudny 2018].

Nowadays, experiences management plays an important role as they have become an important element of social development [Cohen 1979]. They fulfil higher-rank needs which are supposed to detract us from everyday life and ensure a range of positive emotions [Poulsson, Kale 2004; Stasiak 2013]. Thanks to the experiences featuring vehicles, people who purposely visit automobile museums first and foremost gain knowledge in this area. An important group are tourists for whom such a visit is an adventure enriching their lives and providing entertainment in their free time [Cudny 2018]. Following this pattern, an ideal way to provide more extraordinary experiences is visiting factories or participating in various events organised at automobile museums. Automotive events sector is very well developed. In Poland alone, there are hundreds of events per year, from smaller rallies to big international events (Figure 3C and D). Visiting factories proves to be more difficult though, which might be connected with low awareness of the existence of the analysed kind of tourism and limited willingness to preserve automotive technology heritage among local authorities [Pokojska 2014]. Nevertheless, there are some positive examples in this area [Cudny, Horňák 2016].

Selected automobile museums, especially smaller ones, apart from their positive aspects, face problems (Figures 3A, 7A and B) which include underdeveloped basic and additional services (and occasionally lack of them) or their low quality. People writing opinions on the Internet indicate bad organisation or bad technical condition of the vehicles or the whole venue. It can be stated that some museums stopped in time – their development is small or unnoticeable. For some of them, there is a problem of unmaintained existing facilities and exhibits, often resulting from lack of funds. Another issue is lack of uniform terminology for the venues – ‘automobile museums’ function parallel to ‘private collections’. Such venues sometimes look similar, at times it is the museum which is better developed and more attractive but at other times

it is the private collection which is better. It may cause confusion among potential visitors and influence opinions about the visited places.

Cooperation with the local authorities might be essential for the successful development of smaller, private museums. This might help promote these places, providing appropriate publicity. It should be remembered that such venues are valuable tourist attractions for a given region. Automotive theme trails might be an interesting suggestion, even though so far they have not been implemented. Further development of automotive tourism should, thus, focus on the development of the museums so that they would not have to face enormous costs generated by their maintenance on their own. It is also important to notice the possibilities created by making factories accessible for the tourist traffic which usually also requires the involvement of local authorities. It is best done in Germany, and on a smaller scale in Czechia. Yet in Poland such an offer is non-existent, even though this country has a significant potential, namely venues which used to produce iconic vehicles, venues which are nowadays completely neglected. Even if it is impossible to revitalise and adapt such a manufacture for visitors by turning them into a museum, for example [Jędrzyak 2011], it is important to take care of and commemorate it, something which can take on various forms, e.g. educational trails or open-air exhibitions.

Conclusions

The potential of the automotive tourism was noticed particularly by big concerns in Western Europe, which use their history for marketing purposes, thus popularising the concept of vehicles-related museums. However, in Central Europe smaller venues dominate, run usually by private persons or local government. The theme of automotive technology can be presented on many levels – from museum exhibits or private collections, to factories accessible for tourists, to a range of sporting events, rallies or theme events. All of them may focus on either a very narrow and specialised branch of the industry or unify its various aspects in one full picture. Continuing research in this area is very important so that the automotive element becomes appreciated as an important part of cultural heritage, also by regional and local authorities.

The main achievement of the article should be considered the juxtaposition of patterns set by the largest automobile museums with the performance of smaller institutions in Central Europe. On the other hand, the problems faced by the latter were

pointed out. The study takes into account only selected aspects of the functioning of museums, ignoring, for example, forms of heritage interpretation or factors influencing the reception of institutions, such as cleanliness, toilets and the quality of service. These factors should be considered in further studies. The conducted research shows only one aspect of automotive tourism. Others include – as mentioned above – car factory tours or events on this subject. So it is not a complete picture, although it gives some idea of the potential that automotive tourism has in Central Europe. Quantitative features were taken into account to a greater extent, although efforts were made to analyse also qualitative features, such as cooperation between museums and other tourist attractions. On the other hand, the intention was to make the evaluation method as objective as possible, hence more emphasis on quantitative features. The custom-made assessment system is arbitrary but it serves the purpose for which it was designed.

Automotive industry evolves from one day to another, and in the era of mass-consumption it is not important to take care of everyday objects, a category which vehicles belong to. Nevertheless, in this case, they cannot be perceived just at the level of objects making people's lives easier. Automotive industry is a history lesson on the subject of the changes in industry, technology, perception of distance, overcoming limits. This is what makes it such an important element of cultural heritage, giving a meaning to automotive tourism whose essence should be more sincerely appreciated.

References

- Banaszkiewicz M., 2011, *Pamiątki turystyczne – w poszukiwaniu tożsamości* [Tourist souvenirs – in search of identity], "Turystyka Kulturowa", 4/2011, pp. 4-16
- Basso A., Funari S., 2004, *A quantitative approach to evaluate the relative efficiency of museums*, "Journal of Cultural Economics", 28(3), pp. 195-216, DOI: 10.1023/B:JCEC.0000037997.23746.f2
- Bertacchini E. E., Dalle Nogare C., Scuderi R., 2018, *Ownership, organization structure and public service provision: the case of museums*, "Journal of Cultural Economics", 42, pp. 619-643, DOI: 10.1007/s10824-018-9321-9
- Bonti M., 2014, *The corporate museums and their social functions: some evidence from Italy*, "European Scientific Journal", 10(10), pp. 141-150
- Brida J. G., Dalle Nogare C., Scuderi R., 2016, *Frequency of museum attendance: motivation matters*, "Journal of Cultural Economics", 40, pp. 261-283, DOI: 10.1007/s10824-015-9254-5
- Buczowska K., 2008, *Turystyka kulturowa* [Cultural tourism], Akademia Wychowania Fizycznego w Poznaniu, Poznań

- Buczowska K., 2009, *Kulturowa turystyka eventowa* [Cultural event tourism], [in:] K. Buczowska, A. Mikos von Rohrscheidt (eds.), *Współczesne formy turystyki kulturowej* [Contemporary forms of cultural tourism], Wydawnictwo Akademii Wychowania Fizycznego w Poznaniu, Poznań, pp. 91-118
- Burton C., Louviere J., Young L., 2009, *Retaining the visitor, enhancing the experience: Identifying attributes of choice in repeat museum visitation*, "International Journal of Nonprofit and Voluntary Sector Marketing", 14(1), pp. 21-34, DOI: 10.1002/nvsm.351
- Camarero C., Garrido M.-J., 2008, *Improving museums' performance through custodial, sales, and customer orientations*, "Nonprofit and Voluntary Sector Quarterly", 38(5), pp. 846-868, DOI: 10.1177/0899764008319230
- Camarero C., Garrido M. J., Vicente E., 2011, *How cultural organizations' size and funding influence innovation and performance: The case of museums*, "Journal of Cultural Economics", 35(4), pp. 247-266, DOI: 10.1007/s10824-011-9144-4
- Cater C. I., 2017, *Tourism on two wheels: Patterns of motorcycle leisure in Wales*, "Tourism Management", 61, pp. 180-189, DOI: 10.1016/j.tourman.2017.02.007
- Cellini R., Cuccia T., 2013, *Museum and monument attendance and tourism flow: A time series analysis approach*, "Applied Economics", 45(24), pp. 3473-3482, DOI: 10.1080/00036846.2012.716150
- Cohen E., 1979, *A phenomenology of tourist experience*, "Sociology", 13(2), pp. 179-201, DOI: 10.1177/003803857901300203
- Coles T. E., 2008, *International car manufactures, brandscapes and tourism: Engineering the experience economy*, [in:] T. E. Coles, C. M. Hall (eds.), *International business and tourism: global issues, contemporary interactions*, Routledge, London, pp. 238-255
- Cudny W., 2018, *Car tourism*, Springer International Publishing AG, Cham
- Cudny W., Horňák M., 2016, *The tourist function in a car factory Audi Forum Ingolstadt example*, "Bulletin of Geography. Socio-economic Series", 33, pp. 23-38, DOI: 10.1515/bog-2016-0022
- Cudny W., Jolliffe J., 2019, *Car tourism – conceptualization and research advancement*, "Geografický časopis/Geographical Journal", 71(4), pp. 319-340, DOI: 10.31577/geogrcas.2019.71.4.17
- Domański B., Guzik R., Gwosdz K., Dej M., 2013, *The crisis and beyond: the dynamics and restructuring of automotive industry in Poland*, "International Journal of Automotive Technology and Management", 13(2), pp. 151-166, DOI: 10.1504/ijatm.2013.052998
- Evrard Y., Krebs A., 2018, *The authenticity of the museum experience in the digital age: the case of the Louvre*, "Journal of Cultural Economics", 42, pp. 353-363, DOI: 10.1007/s10824-017-9309-x
- Fjelstul J., Fyall A., 2015, *Sustainable Drive Tourism: A Catalyst for Change*, "International Journal of Tourism Research", 17(5), pp. 460-470, DOI: 10.1002/jtr.2013
- Folga-Januszewska D., 2009, *Muzea w Polsce 1989-2008* [Museums in Poland 1989-2008], "Muzealnictwo", 50, pp. 18-46
- Frash Jr. R. E., Blose J. E., 2019, *Serious leisure as a predictor of travel intentions and flow in motorcycle tourism*, "Tourism Recreation Research", 44(4), pp. 516-531, DOI: 10.1080/02508281.2019.1626118
- Frash Jr. R. E., Blose J. E., Smith W. W., Scherhag K., 2018, *A multidisciplinary marketing profile of motorcycle tourists: explorers escaping routine to find flow on scenic routes*, "Tourism Recreation Research", 43(4), pp. 432-444, DOI: 10.1080/02508281.2018.1492767

- Fyall A., Garrod B., Leask A. (eds.), 2003, *Managing Visitor Attractions: new directions*, Butterworth-Heinemann, Oxford
- Getz D., 2007, *Event Studies. Theory, Research and Policy for Planned Events*, Butterworth-Heinemann, Oxford
- Getz D., 2008, *Event tourism: Definition, evolution, and research*, "Tourism Management", 29, pp. 403-428, DOI: 10.1016/j.tourman.2007.07.017
- Günay B., 2012, *Museum concept from past to present and importance of museums as centers of art education*, "Procedia – Social and Behavioral Sciences", 55, pp. 1250-1258, DOI: 10.1016/j.sbspro.2012.09.622
- Guzik R., Domański B., Gwosdz K., 2020, *Automotive Industry Dynamics in Central Europe*, [in:] A. V. Covarrubias, S. M. Ramírez Perez (eds.), *New Frontiers of the Automobile Industry*, Springer International Publishing, Cham, pp. 377-397
- Hallo J. C., Manning R. E., 2009, *Transportation and recreation: a case study of visitors driving for pleasure at Acadia National Park*, "Journal of Transport Geography", 17(6), pp. 491-499, DOI: 10.1016/j.jtrangeo.2008.10.001
- Heidbrink G. (ed.), 2010, *Mercedes-Benz Museum*, Mercedes-Benz, Stuttgart
- Jackson R., 1988, *A Museum Cost Function*, "Journal of Cultural Economics", 12, pp. 41-50, DOI: 10.1007/BF00220045
- Janus K., 2015, *Muzea i ludzie [Museums and people]*, [in:] A. Banaś, K. Janus (eds.), *Laboratorium muzeum. Społeczność*, Muzeum Warszawy, Warsaw, pp. 9-19
- Jęczmyk A., Sammel A., 2013, *Turystyka muzealna [Museum tourism]*, "Turystyka i Rekreacja", 10(1), pp. 21-27
- Jędrusiak T., 2011, *Turystyka kulturowa w obiektach poprzemysłowych – zagadnienia ogólne [Cultural tourism in post-industrial buildings – general issues]*, "Turystyka Kulturowa", 6, pp. 17-34
- Kaczmarek A., Przybyłka A., 2010, *Wykorzystanie potencjału przemysłowego i poprzemysłowego na potrzeby turystyki. Przykład Szlaku Zabytków Techniki województwa śląskiego [The use of industrial and post-industrial potential for the needs of tourism. An example of the Industrial Monuments Route of the Silesian Voivodeship]*, "Prace Komisji Krajobrazu Kulturowego", 14, pp. 207-228
- Kent R., Elliott C., 1995, *Scenic routes linking and protecting natural and cultural landscape features: a greenway skeleton*, "Landscape and Urban Planning", 33(1-3), pp. 341-355, DOI: 10.1016/0169-2046(94)02027-d
- Kołodziejczyk K., 2019, *Heritage Tram Lines in Wrocław – analysis of the tourist offer from an urban tourism perspective*, "Tourism", 29(1), pp. 23-33, DOI: 10.2478/tour-2019-0003
- Kołodziejczyk K., 2020, *Between elitism and egalitarianism: The Heritage Tram Line in Wrocław as an example of a search for an acceptable tourist product*, "Tourism", 30(1), pp. 105-121, DOI: 10.18778/0867-5856.30.1.22
- Kołodziejczyk K., Michnicka K., 2021, *Popularność turystyki motoryzacyjnej w świetle frekwencji w muzeach motoryzacji w Polsce i Republice Czeskiej [The popularity of automotive tourism in the light of attendance at automobile museums in Poland and the Czech Republic]*, "Turystyka Kulturowa", 2, pp. 7-49
- Komarac T., Ozretic-Dosen D., Skare V., 2020, *Managing edutainment and perceived authenticity of museum visitor experience: insights from qualitative study*, "Museum Management and Curatorship", 35(2), pp. 160-181, DOI: 10.1080/09647775.2019.1630850

- Kruczek Z., 2011, *Atrakcje turystyczne. Fenomen, typologia, metody badan* [Tourist attractions. Phenomenon, typology, research methods], Proksenia, Kraków
- Kruczek Z., 2014, *Frekwencja w atrakcjach turystycznych* [Attendance at tourist attractions], Polska Organizacja Turystyczna, Kraków–Warszawa
- Kruczek Z., 2017, *Frekwencja w atrakcjach turystycznych w latach 2011-2015. Dynamika, trendy, studia przypadku* [Attendance at tourist attractions in 2011-2015. Dynamics, trends, case studies], Proksenia, Kraków
- Kruczek Z., 2019, *Frekwencja w atrakcjach turystycznych w latach 2016-2018* [Attendance at tourist attractions in 2016-2018], Polska Organizacja Turystyczna, Kraków–Warszawa
- Laskowska J., 1996, *Nowe tendencje w muzealnictwie* [New trends in museology], "Konteksty: Polska Sztuka Ludowa", 50(1-2), pp. 66-75
- Lisowska A., 2016, *Stara Kopalnia Centrum Nauki i Sztuki w Wałbrzychu – przykład rewitalizacji obiektów przemysłowych na cele kulturowe* [Stara Kopalnia Science and Art Centre in Wałbrzych – an example of revitalisation of industrial facilities for cultural purposes], "Turystyka Kulturowa", 4, pp. 6-20
- Liu P., Lan L., 2021, *Museum as multisensorial site: story co-making and the affective interrelationship between museum visitors, heritage space, and digital storytelling*, "Museum Management and Curatorship", 36(4), pp. 403-426, DOI: 10.1080/09647775.2021.1948905
- Marak J., Wyrzykowski J., 2010, *Klasyfikacja ruchu turystycznego* [Classification of tourist traffic], [in:] J. Wyrzykowski, J. Marak (eds.), *Turystyka w ujęciu interdyscyplinarnym*, Wyższa Szkoła Handlowa, Wrocław, pp. 20-29
- Margolius I., Henry J. G., 2015, *Tatra – The Legacy of Hans Ledwinka*, Veloce Publishing Ltd., Poundbury
- McKercher B., 2002, *Towards a classification of cultural tourists*, "International Journal of Tourism Research", 4(1), pp. 29-38, DOI: 10.1002/jtr.346
- McKercher B., Chan A., 2005, *How special is special interest tourism?*, "Journal of Travel Research", 44(1), pp. 21-31, DOI: 10.1177/0047287505276588
- Michnicka K., Kołodziejczyk K., 2021, *Percepcja turystyki motoryzacyjnej i motywacje osób odwiedzających muzea motoryzacyjne i uczestników wydarzeń motoryzacyjnych* [Perception of automotive tourism and motivations of visitors to automobile museums and participants of automotive events], "Prace Geograficzne", 165, pp. 69-89, DOI: 10.4467/20833113PG.21.010.14587
- Mika M., 2007, *Klasyfikacja ruchu turystycznego* [Classification of tourist traffic], [in:] W. Kurek (ed.), *Turystyka*, Wydawnictwo Naukowe PWN, Warsaw, pp. 197-198
- Mikos von Rohrscheidt A., 2008, *Turystyka kulturowa: fenomen, potencjał, perspektywy* [Cultural tourism: the phenomenon, potential, perspectives], GWSHM Milenium, Gniezno
- Morgan J., MacDonald S., 2020, *De-growing museum collections for new heritage futures*, "International Journal of Heritage Studies", 26(1), pp. 56-70, DOI: 10.1080/13527258.2018.1530289
- Möser K., 2003, *The dark side of 'automobilism', 1900-30: Violence, war and the motor car*, "The Journal of Transport History", 24(2), pp. 238-258, DOI: 10.7227/tjth.24.2.7
- Nitkiewicz-Jankowska A., 2006, *Turystyka przemysłowa wizytówką Górnośląskiego Okręgu Przemysłowego* [Industrial tourism as a showcase of the Upper Silesian Industrial District], "Prace Naukowe Instytutu Górnictwa Politechniki Wrocławskiej", 117, pp. 251-256

- Nowacki M., Kruczek Z., 2021, *Experience marketing at Polish museums and visitor attractions: the co-creation of visitor experiences, emotions and satisfaction*, "Museum Management and Curatorship", 36(1), pp. 62-81, DOI: 10.1080/09647775.2020.1730228
- Petrulina L., 2019, *Museums: Towards the Social Institution*, [in:] K. Smeds (ed.), *The Future of Tradition in Museology. Materials for a discussion*, International Committee for Museology – ICOFOM, Paris, pp. 133-137
- Piątkowska K., 2014, *The Corporate Museum: A New Type of Museum Created as a Component of Company Marketing*, "The International Journal of the Inclusive Museum", 6(2), pp. 29-37, DOI: 10.18848/1835-2014/cgp/v06i02/44436
- Plaček M., Ochraňa F., Půček M., Nemec J., Křápek M., del Campo C., 2020, *Autonomy and performance of local museums: the case of Czech Republic*, "Museum Management and Curatorship", DOI: 10.1080/09647775.2020.1803112
- Plaček M., Půček M. J., Šilhánková V., 2017, *New trends in the strategic management of museums in the Czech Republic*, "Museum Management and Curatorship", 32(4), pp. 302-318, DOI: 10.1080/09647775.2017.1347808
- Pokojska W., 2014, *Mercedes-Benz Museum Stuttgart – muzeum idealne? [Mercedes-Benz Museum Stuttgart – perfect museum?]*, "Zarządzanie w Kulturze", 15(2), pp. 117-130
- Poulsson S. H. G., Kale S. H., 2004, *The experience economy and commercial experiences*, "The Marketing Review", 4(3), pp. 267-277, DOI: 10.1362/1469347042223445
- Prentice R., Guerin S., McGugan S., 1998, *Visitor learning at a heritage attraction: a case study of discovery as a media product*, "Tourism Management", 19(1), pp. 5-23, DOI: 10.1016/S0261-5177(97)00077-0
- Prideaux B., Carson D., 2011a, *The structure and role of drive tourism*, [in:] B. Prideaux, D. Carson (eds.), *Drive tourism: trends and emerging markets*, Routledge, Abingdon, pp. 3-13
- Prideaux B., Carson D. (eds.), 2011b, *Drive Tourism: trends and emerging markets*, Routledge, Abingdon
- Richards G., 1996, *The scope and significance of cultural tourism*, [in:] G. Richards (ed.), *Cultural Tourism in Europe*, CABI, Wallingford, pp. 21-38
- Rostocki A. M., 2009, *Poczet twórców motoryzacji [Most important automotive creators]*, ZP Grupa Sp. z o.o., Warsaw
- Scuttari A., 2019, *Cycling and Motorcycling Tourism. An Analysis of Physical, Sensory, Social, and Emotional Features of Journey Experiences*, Springer Nature Switzerland AG, Cham
- Stasiak A., 2013, *Tourist product in experience economy*, "Tourism", 23(1), pp. 27-35, DOI: 10.2478/tour-2013-0003
- Swarbrooke J., 1995, *Development and Management of Visitor Attractions*, Butterworth-Heinemann, Oxford
- Sykes D., Kelly K. G., 2016, *Motorcycle drive tourism leading to rural tourism opportunities*, "Tourism Economics", 22(3), pp. 543-557, DOI: 10.5367/te.2014.0454
- Szelichowski S., 2017, *Motoryzacja w Polsce [Automotive technology in Poland]*, P.H.W. FENIX, Bełchatów
- Taheri H., Ansari S., 2013, *Measuring the relative efficiency of cultural-historical museums in Tehran: DEA approach*, "Journal of Cultural Heritage", 14(5), pp. 431-438, DOI: 10.1016/j.culher.2012.10.006
- Trauer B., 2006, *Conceptualizing special interest tourism—frameworks for analysis*, "Tourism Management", 27(2), pp. 183-200, DOI: 10.1016/j.tourman.2004.10.004

- Volti R., 1995, *The Petersen Automotive Museum*, "Technology and Culture", 36(3), pp. 646-650, DOI: 10.2307/3107247
- Wen J., Wu M.-Y., 2020, *How special is special interest tourism – and how special are special interest tourists? A perspective article in a Chinese context*, "Current Issues in Tourism", 23(16), pp. 1968-1972, DOI: 10.1080/13683500.2020.1750575
- Widawski K., Duda-Seifert M. (eds.), 2014, *Turystyka przemysłowa w kontekście rozwoju zrównoważonego* [Industrial tourism in the context of sustainable development], Uniwersytet Wrocławski, Wrocław
- Wu H.-Ch., Ai Ch.-H., Chang Y.-Y., 2019, *What Drives Experiential Sharing Intentions Towards Motorcycle Touring? The Case of Taiwan*, "Journal of China Tourism Research", DOI: 10.1080/19388160.2019.1705955
- Xie P. F., 2006, *Developing industrial heritage tourism: A case study of the proposed jeep museum in Toledo, Ohio*, "Tourism Management", 27(6), pp. 1321-1330, DOI: 10.1016/j.tourman.2005.06.010

Electronic resources

- Blasi W., 2014, *Automobile Industry (Austria-Hungary)*, [in:] U. Daniel, P. Gatrell, O. Janz, H. Jones, J. Keene, A. Kramer, B. Nasson (eds.), *1914-1918-online. International Encyclopedia of the First World War*, Freie Universität Berlin, https://encyclopedia.1914-1918-online.net/article/automobile_industry_austria-hungary [02.09.2021]
- JATO, 2019, *Global car market remains stable during 2018, as continuous demand for SUVs offsets decline in sales of Compact cars and MPVs*, <https://www.jato.com/global-car-market-remains-stable-during-2018-as-continuous-demand-for-suvs-offsets-decline-in-sales-of-compact-cars-and-mpvs/> [05.06.2020]
- Rae J. B., Binder A. K., 2018, *Automotive industry*, Encyclopædia Britannica. <https://www.britannica.com/technology/automotive-industry> [02.09.2021]
- Wagner I., 2020, *Revenue of leading carmakers worldwide 2019*, Statista, <https://www.statista.com/statistics/232958/revenue-of-the-leading-car-manufacturers-worldwide/> [05.06.2020]

Ewaluacja muzeów motoryzacji w Polsce i Czechach

Abstrakt

W artykule przedmiotem analizy uczyniono wybrany aspekt turystyki motoryzacyjnej, definiowanej przez autorów jako podróże, których celem i motywacją jest odwiedzenie miejsc związanych z motoryzacją, ważnych dla jej rozwoju i historii: muzeów motoryzacji, fabryk samochodowych czy prywatnych kolekcji. Celem pracy jest ocena stanu, w jakim znajdują się muzea motoryzacji w Polsce i Czechach, w szczególności stopnia zaawansowania organizacji tych placówek i atrakcyjności ich oferty, do czego posłużyła metoda bonitacji punktowej. Wyniki są dość zróżnicowane, odzwierciedlając problemy, z jakimi mierzą się przede wszystkim mniejsze, prywatne placówki, choć niektóre z nich uzyskały wyższe oceny niż jednostki samorządowe. Najlepszy rezultat w ogóle uzyskało Muzeum Techniki i Komunikacji – Zajezdnia Sztuki w Szczecinie, zaś w Czechach – Škoda Muzeum. Ostatnie pod pewnymi aspektami jest porównywane z niemieckim muzeum Mercedes-Benz Welt, które ze względu na poziom inwestycji najlepiej wpisuje się w założenia nowoczesnego muzeum o analizowanej tematyce. W oparciu o wyniki można stwierdzić, że potencjał turystyki motoryzacyjnej został zauważony głównie przez duże koncerny samochodowe, które wykorzystują swoją historię do marketingu.

Słowa kluczowe: motoryzacja, turystyka motoryzacyjna, muzeum, dziedzictwo