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NEW FORMS OF EDUCATION IN PROMOTION OF INDUSTRIAL TOURISM ON THE EXAMPLE OF THE EDUCATIONAL PATH “ŚWIĘTOKRZYSKIE IN THE FOOTSTEPS OF STANISŁAW STASZIC”**

Abstract

The world is changing, the media also. In recent years, a publicity activities give a key rule in sphere of building a good image. From the beginning of the 21st century we can observe an increased meaning of industrial tourism – both around the world and in Poland. With reference to this the concept and tools of marketing for this field of tourism have also developed significantly. So the following also appeared: How to get to a customer? Is it better to choose a traditional way – tourist guide or maybe a field game in form of a mobile app? What should we choose depending on the age diversity of the participants? What knowledge can we pass via mobile app? How to prepare an interesting tourist guide? And finally, how to promote these media in order to reach a wide audience? In this paper, you will find answers for these and many other questions about promotion of industrial tourism in the 21st century. The answers were prepared based on the original industrial tourism project entitled “In the footsteps of Stanisław Staszic”.

Keywords

Industrial tourism, marketing, tourist guide, mobile app, Stanisław Staszic

1. INTRODUCTION

For decades tourism has been one of the research disciplines studied by many scholars. The concept of “tourism” is very complex. Many publications provide information about various descriptions, characteristics and classifications of it, however, the most important, even though

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purely theoretical, are the forms and types of tourism. The world is changing, developed and developing societies' members are changing as well – man's status is changing positively and interest in spaces that are unique, unknown and not obvious is increasing. We are noticing the changes in the tourism – due to increasing number of attractions being offered, the competition to gain the customer forced heritage site supervisors to broaden the scope of their activities. The activities offered by cultural units can no longer be static, the room with exhibits does not suffice anymore. The museums are introducing more multimedia and electronics, the touristic offer started to incorporate the elements of didactics in workshops and museum lessons, moreover, active sightseeing (e.g. field games) gains popularity, as well. All of these pursuits aim at attracting the tourists, engaging them, making them think and retain information. However, gaining the customer is not as easy as it may seem. Tourist operators have at their disposal increasing number of mass media, which can have both positive and negative consequences. Modern customer is overwhelmed by a variety of information – both desired and unwanted. How to reach the customer then? Which teaching methods and tools should be used and which should not? Should a traditional method, like a travel guide be chosen or maybe a field game in the form of a mobile application is a better alternative? Which target groups can we reach using these particular external communication channels? What information can we forward via a mobile app? How to prepare an interesting travel guide? These and many more questions will be responded to by the author of this paper, who presents the execution of project started to create touristic and educational trail “Świętokrzyskie in the footsteps of Stanisław Staszic”.

2. DEFINITIONS – ABOUT THE MASS MEDIA AND DIDACTICS

The word “didactics” comes from a Greek word “didaktikós”, which means “apt at teaching”. It is a branch of pedagogy that specializes in the analysis of “the objectives, content, methods, means and organizational forms of the process of education”. In the past didactics has been treated as the art of teaching and passing information by the teacher. With the development, this branch started to be recognized as a theory that influences effective instructing by setting optimal methods and conditions to achieve predefined educational objectives. Currently in the simplest understanding this term is used both in reference to self-education and being taught. The forms of education focus on an organizational side of didactics, answering the questions *who, where, when and why* should be trained. They also allow arranging extra-curricular activities for individual participants, groups and teams.

The mass media signify the tools, instruments and institutions whose objective is to forward information to multiple receivers within the same time window. There are the following types of mass media:

- newspapers and magazines,
- radio,
- television,
- movies,
- books,
- music recordings (CDs and cassettes),

- new media:
 - VCR,
 - DVD player,
 - film recordings (VHS, DVD),
 - TV page, TV, satellite and cable TV,
 - computer games,
 - the Internet (computer) [1].

These tools are commonly recognized and developed. Each of them aims at reaching a different group of respondents and engages them in a different way by setting various requirements. Because “receiving the product of media always requires the recipient to focus and perform some form of interpretative activity, the receiver of the product needs to express some interest in the message (either read it, watch it, look at it or listen to it)” [2]. Table 1 shows the functions of mass media,

Table 1. The functions of mass media

Function	Description
Overseeing the society	observation of important and interesting changes in the man’s environment, informing about them (with a special focus on information giving people opportunities or information being a threat for them)
Correlation between the reaction of the group in the society and towards the environment	distribution of the standards of activities for the individuals, institutions or the society applicable to combat threats and utilizing the opportunities (among other things those discovered during the observation of the environment)
Transmission of the cultural heritage	passing the most important elements of cultural heritage to other generations with a special focus on: effective activities within combating the threats and using potential opportunities; sharing behaviour standards for the purpose of integration and which will allow for identification of both the individuals and the community

Source: own work, based on [2, 3]

According to H.D. Lasswell, the mass media perform following three basic functions:

- 1) overseeing the society.
- 2) correlation between the reaction of the group in the society and towards the environment.
- 3) transmission of the cultural heritage [4, p. 111].

Industrial tourism, which has been referred to in the title of this paper, fulfills all the functions performed by mass media, with the strongest focus on transmission of the cultural heritage.

3. A FEW WORDS ABOUT THE SITUATION OF THE INDUSTRIAL TOURISM IN POLAND

Industrial tourism is one of the forms of the tourism [1]. It became a research subject for many scholars and a point of interest for tourists in Poland and abroad, not earlier than in the 21st century. The division of forms of industrial tourism is presented in Figure 1. What should we understand by the industrial tourism? This is the form tourism which aims at visiting the areas where technological processes from the past could be backtracked, the machines used in these processes could be seen and where the significance of this particular site for the history of modern industry could be understood [5]. We could assume, accepting a certain level of simplicity that the industrial heritage tourism is present in the facilities where the function to produce has been replaced with the cultural function (the museums and art galleries) [6].

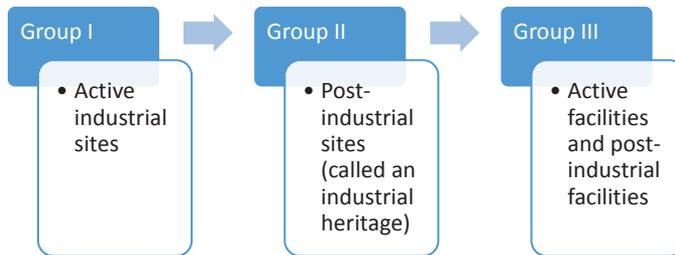


Fig. 1. Industrial tourism recognized by Polish and foreign scholars

Source: [5]

Analysing the term of industrial tourism in more depth, following Maciej Kronenberg we could distinguish [5]:

- “industrial tourism – which refers to the touristic activity in active industrial facilities that presents and explains current production processes;
- post-industrial tourism – which refers to touristic activity in the facilities where the old productive function has been ceased but the remnants of this function have been preserved, e.g. in the form of the factory buildings;
- industrial heritage tourism – which includes tourist activity where the heritage is the main attraction and getting to discover this heritage is the main reason for the tourist visiting”.

Based on the data of the National Heritage Institute (as of September 28, 2016) there are 71,041 registered as immovable heritage; 2,500 of which are industrial facilities (see Fig. 2).

In the last few years in Poland there is more focus on the development and protection of the post-industrial facilities, which means preservation maintenance and control, registering the facility in the registry of heritage and also creating lofts or revitalizing the original space and adjusting it for new functions.

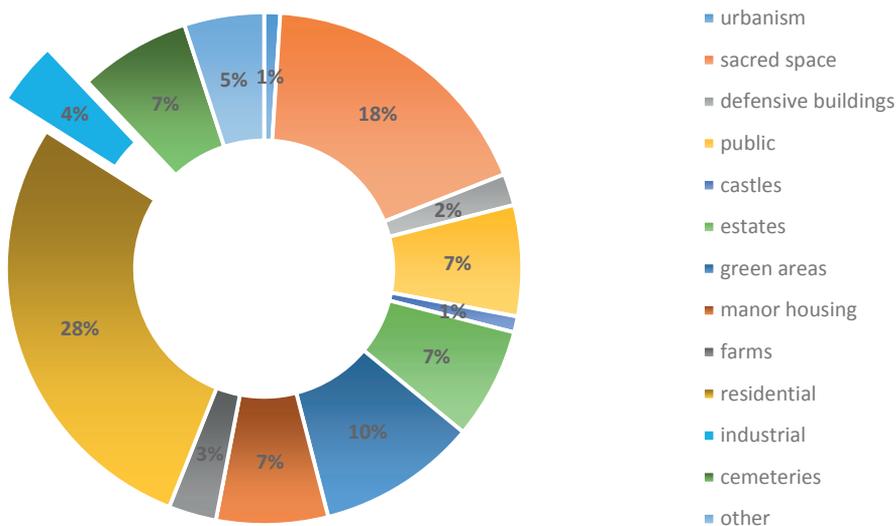


Fig. 2. Immovable heritage facilities, based on the data from the National Heritage Institute – as of September 28, 2016

Source: own work based on [7]

The research about the state of tourism in Poland shows that about 16% of all people who visit the sights are active, enjoy long walks and hiking trips and like gaining new knowledge when relaxing. Another significant group of tourists (15%) looks for uniqueness. They are a demanding group of customers, who are not interested in a classic touristic offer. They would not be excited by a beautiful, old market square but they will enjoy visiting an old, neglected and maybe even forgotten factory, whose beauty and meaning are not recognized by a big group of recipients. The total of 30% of the recipients expects a precise and complete offer for free time activities. A complete offer is available on the Industrial Monuments Route in Silesia Voivodship, created in 2006, with 470 km from Częstochowa, through Bielsko-Biała, Katowice to Żywiec. The Route offers forty-two industrial heritage facilities, some of which are located on the European Route of Industrial Heritage. Six years after the route has been finished (January 13, 2010) it became a part of the European Route of Industrial Heritage. The Industrial Monuments Route in Silesia offers the following: substantive historic information, accommodations, supporting facilities, educational workshops, etc.

Analyzing “The Tourism Development Strategy of Poland” published in 1997, we read that the strategy focused on:

- “cultural and urban tourism”: supporting development of urban tourism, supporting development of high-quality cultural tourism, supporting pilgrimage and ethnic tourism, supporting post-industrial tourism;
- “recreational, active and special” tourism: supporting spa and health recreation facilities tourism, medical and rehabilitation and supporting active forms of tourism, including water tourism and bicycle tourism [8].

The Upper Silesian Industrial Region is currently the largest industrial region in Poland (7,700 km², 4 million employed), with the prevailing dominance of heavy engineering (coal, iron and lead mining and metallurgy). In the past the Old-Polish Industrial Region, now located in Świętokrzyskie Voivodship used to be the leader. We read in the Directions of development of tourism until 2015 that “the technical heritage sites of the Old-Polish Industrial Region had a unique informative value”, e.g. the sites located in Maleniec, Stara Kuźnica and Nowa Słupia [8].

4. THE HISTORY OF THE PROJECT “ŚWIĘTOKRZYSKIE IN THE FOOTSTEPS OF STANISŁAW STASZIC”

An idea to create an educational route through the Old-Polish Industrial Region came to live in the middle of 2015. An author, who lives in Świętokrzyskie Voivodship and who knew some post-industrial sites of her region as well as their conditions, made a decision to research the sites some more.

An increasing interest in industrial tourism and active free time leisure combined with gaining knowledge about local history, mentioned in this paper before, were the main reasons to design the educational route project. The project has also originated in a belief that local governments at various levels were inefficient in protecting and utilising the existing cultural heritage.

The timeline of the project has been determined by two important anniversaries, observed in 2016: 200 years anniversary of founding the University of Mining and Mathematics in Kielce – the first Polish higher technical college and 190th Memorial Day of Stanisław Staszic. Since the author of the project was engaged in the Management Study Group of AGH University of Science and Technology, the study group became the main contractor of the project. The Management Study Group has already prepared a few years ago a Virtual Industrial Travel Guide – nominated the best project for the AGH Dean’s Grant of 2011 [9]. This topic has received very positive reviews from the research and tourist community during the seminar entitled “Stanisław Staszic for the modern world – new interpretation of Staszic ideas” which was held in May, 2012 at the AGH University of Science and Technology in Krakow. The fact that the AGH is named with Staszic’s name, who was the pioneer and founding father of Polish industry was one more reason for the project to receive positive reviews.

As has been proven, there were many reasons to support the importance of this project. The authors have visited and researched more than a dozen of facilities in Świętokrzyskie Voivodship, learning briefly their stories and how they were related to the work of Stanisław Staszic. After some consultation sessions during the meetings of the study group, a draft idea to create an educational route that connects representative facilities has been created. As per Jan Pazdur’s concept the route would complete Świętokrzyskie Adventure Trails with the places relating to the history of Polish industry. A paper presenting an idea of eco-museum by Kamienna River which could connect all facilities of an old continuous factory of iron factories was presented in Starachowice in the 1980s [10, 11].

In 2016 the project has received the AGH Dean's Grant which has been spent on the following activities:

- design of the visual identification of the project and the route: project logo, letterhead, etc.;
- selection of the representative objects that will be included on the route (14 facilities);
- expansion of the existing photographic documentation from 2011 for these facilities;
- work on descriptions for all facilities;
- design and placing an order for information boards for all objects (see Fig. 3);
- placing information boards on the sites where the heritage facilities are located;
- creating a profile for the project and promotion of the route on Facebook;
- cooperation with about twenty institutions (museums, local governments and others), who were the administrators or the technical sponsors of these facilities.



Fig. 3. Information board “Świętokrzyskie in the footsteps of Stanisław Staszic” placed in Brody

Source: www.facebook.com/gmina.brody

The project has been welcomed with a lot of enthusiasm, the partners joined the activities with a lot of willingness and the local media expressed interest in the project by the articles and radio shows. With that recognition the authors of the project gained confidence and decided to continue and develop the works that have been already started.

5. THE PROCESS OF PREPARATION OF THE TRAVEL GUIDE

The first educational element to be created was the travel guide (see Fig. 4), since creation of which seemed to be the easiest task, with the tools already at our disposal. The first step was

compliant with the organizational form of education and aimed at responding to the questions: *who, where, when* and *why*. The target group that this travel guide is directed to are people who have passion for tourism and tour guides who could recommend a publication of such sort. Because publishing required financial support, an application for subsidy from the Marshall Office of Świętokrzyskie has been submitted. After a positive decision for the Grant has been received, intensive work to gain materials and preparation of the information about all the facilities located on the route have started. At this stage, the relationship with the facility administrators proved to be very helpful. It is important to know that not many works have been published about the facilities of the Old-Polish Industrial Region and research is very difficult for people who come from outside of the branch. The next key activity was collecting a broad spectrum of photographic documentation which presented fourteen facilities on the route. In order to get the access to the pictures from the archives, cooperation with the administrators and researching an old literature were needed.

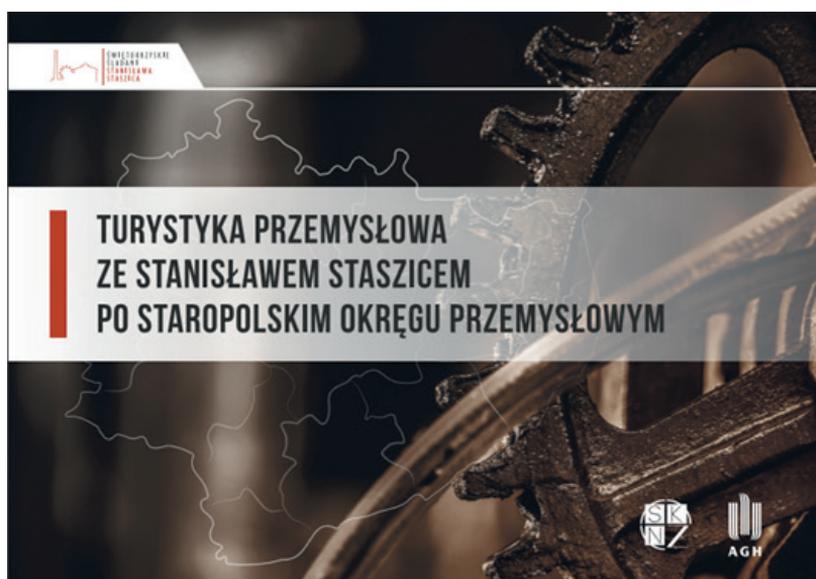


Fig. 4. The cover page of the *Industrial Tourism: With Stanislaw Staszic on the Route of the Old-Polish Industrial Region*

Source: [12]

After the research information and photographic database have been collected, we had to take the steps to publish the book [12]. A decision to create a guide in a book form, including complete touristic information: not only the descriptions of the facility but also its history and basic information about the facility with different suggestions of touristic routes, have been included. Unusual size has been decided on – B5 in a landscape orientation. The history of the Old-Polish Industrial Region has been presented in this guide, together with the descriptions of fourteen facilities from the route “Świętokrzyskie in the footsteps of Stanisław Staszic” and nine trails have been described (see Fig. 5).



Fig. 5. Part of the guide *Industrial Tourism: with Stanisław Staszic on the Route of the Old-Polish Industrial Region* – table of Contents
(the Table of Contents shows two parts of the guide: *Part I – History* and *Part II – Tourist routes*)

Source: [12]

The tourist routes are divided into three categories: walking trails, bicycle trails and car routes. The tourist can choose the route depending on the preferences of the area, the distance and the time they wish to spend sightseeing. General information about the facilities has been included: the original name of each facility, the current name of the facility, exact location, availability, the time it takes to visit it, availability, how long it takes to visit it, availability of the tour guide, possibility of booking and contact details. Thanks to information included in the guide, the tourist does not have to use any electronic devices. The routes – are presented and described in a complete and detailed manner – point after point – so there is no need to use GPS navigation and the information from the guide allows to reach the place at a planned time or to make a booking in advance.

6. MOBILE APP DEVELOPMENT

The next element offering learning by playing is a field game which for the past few years has been attracting more attention of not only younger generation but also the families. The project group decided to create a field game in the form of a mobile application that could be downloaded on the smartphones. The player who travels between the facilities that are marked on the map, solves the assignments and collects points to receive a prize or a discount at the end of the game. It has been decided to create the field game in the form of a mobile

application which includes two route options: Three River Valley (the facilities of the educational route) and Starachowice – Skarżysko – Maleniec (the facilities that are important for the local history). The concept of this game has been developed in cooperation with the Historic Metallurgical Plant in Maleniec and the Museum of the Nature and Technology in Starachowice. When in 2016 these administrative bodies started cooperation with the project group, the initial project has been improved and the project development of Świętokrzyskie in the footsteps of Stanisław Staszic has started (see Fig. 6).



Fig. 6. Algorithm of the activities on the mobile app

After choosing an IT employee, the works to create a graphic design and visualisation of the mobile app have started in August 2017 (see Fig. 7). Simultaneously all institutions involved in the project – the Management Study Group, Museum of the Nature and Technology in Starachowice, Historic Metallurgical Plant in Maleniec and the White Eagle Museum in Skarżysko-Kamienna worked on defining the scope of works. It has been decided that the organization, graphic design and preparations of the draft of the first route will be done by the work group participants of the Management Study Group. The partners have focused on preparing all the activities necessary for design and completion of the second route. The substantive content works took place simultaneously, whereas the programming has been outsourced to an external contractor. The first testing tutorial of the mobile application has been launched in December 2017. There are two scopes of works being currently performed: raising the funds to make the mobile app available and refining the content and the digital programming.

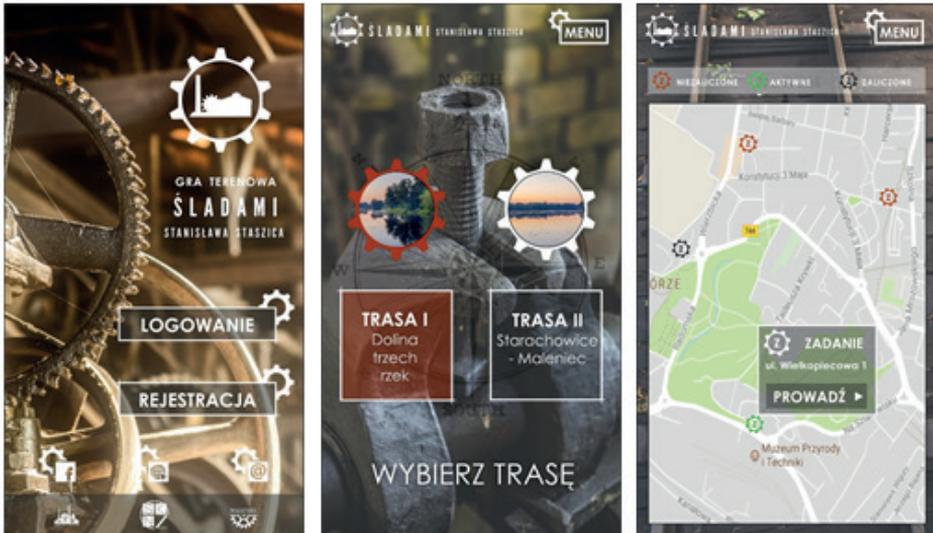


Fig. 7. Visualisation of the mobile application screens

The mobile app user can register and create a personal account. When the user chooses the route of their preferences, they get redirected to the map. The mobile application utilizes GPS location which helps to activate the assignment. The assignment lights up in green when the user is dozens of meters away from it, then the function “lead to the assignment” becomes available. After the user has completed the assignment, the color changes to black and the user receives the points they earned, according to how accurate their answer was or the number of chances they used to find the correct answer. The app records the points and presents the list of facilities that the user visited together with brief descriptions of all these sites. The authors of the mobile application used two locks which force the user to actually move and sightsee. The first lock is the GPS location and the second lock is in the structure of the questions. The questions are structured so that finding the correct answer will be only possible either by using the information boards or by observation of the elements of the environment (e.g. the signs located on the route). Each route will have a minimum of thirty questions that will be awarded points based on the level of difficulty and the structure of the questions.

7. SUMMARY: THE BOOK OR THE MOBILE APP?

Didactics is any form of teaching – self-teaching and teaching others. If the person is knowledgeable, they often want to share it with others and they should be doing so. It is important to respect the knowledge that is available and fully appreciated and make teaching others as attractive as possible. Maintaining an increasing interest in the process of teaching is a very difficult task. It requires a lot of creativity, involvement and hours of preparations. As has been presented in this paper, the members of the Management Study Group have accomplished this challenging task. They accepted to study the literature and articles and to verify their findings despite not an easy access to reach that information. After the study group noticed how important their research topic was, they decided to go one step further. They used new forms of education to share their knowledge about the Old-Polish Industrial Region with young people from Świętokrzyskie Voivodship.

The authors of the project “Świętokrzyskie in the footsteps of Stanisław Staszic” which includes both the travel guide and a mobile app, initially did not plan to execute both projects because of the threat of duplication of target groups. The research analysis showed however that both educational forms – the book and the mobile app target at different groups of users. The book is mainly offered for the enthusiasts of tourism and possibly for the tour guides, whereas the mobile app is for the families with children and the tour guides who can utilize the mobile app to make sightseeing more attractive for their groups. The authors of the project decided to utilize both of these tools to promote tourism, which will surely enrich the whole project. Table 2 shows target groups of the components of the project “Świętokrzyskie in the footsteps of Stanisław Staszic”.

The mobile app offers an attractive game form to provide the user with short, terse but very interesting information which is a significant advantage of this educational tool. The user will get to know the industrial history of Poland by finding solutions to the assignments that are partially based on their knowledge but that are mainly based on an observation. How to prepare an interesting travel guide? The text has to be prepared appropriately and needs to be enriched with a significant amount of professional pictures, with complex information for the

tourists (addresses, contacts, opening hours, etc.). The travel guide also has to offer the routes with descriptions and the maps (including the times of arrival at the historical facilities). The accommodations and restaurants should be also included in the guide.

Table 2. Target groups of the components of the project
“Świętokrzyskie in the footsteps of Stanisław Staszic”

Activity	Target groups					
	student age			families	tourism enthusiasts	tourist guides
	9–13	13–15	15–19			
Workshops	+					
Festival		+	+			
Tourist guide					+	+
Route				+	+	+
Field game		+	+	+		+
Rally	+	+	+		+	
Website	+	+	+	+	+	+

Summarizing, a careful and attractive realisation of both forms of promotion of tourism will allow reaching target groups. It is necessary to undertake extended efforts to promote the project which is not an easy task without the funding. The second, improved edition of the “Industrial Tourism: with Stanisław Staszic in the Old-Polish Industrial Region” is being prepared. The managing editor and the author at the same time is trying to collect orders and raise funding to publish the book. Simultaneously the efforts are being taken to raise funding for improvements and launching the mobile application in Google Store. The project leaders are planning to expand the mobile app by adding more routes in Świętokrzyskie Voivodship that will offer both post-industrial facilities and other, different sites, too. With a little bit of luck and with effective advertising this project could become a valuable educational element for Świętokrzyskie Voivodship.

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