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The Open Monuments Project as an Example of Social Crowdsourcing in Culture. Factors Motivating Crowds to Share Knowledge

Abstract

This paper describes crowdsourcing as a concept of using the knowledge and skills of virtual communities. The analysis focuses on the case study of the polish, cultural Open Monuments Project. The Open Monuments project was initiated in 2012 by Centrum Cyfrowe Projekt: Polska. Its main goal was to encourage Poles to verify and add information on the monuments featured in the Polish national monument register, which often lacks current addresses, exact dates when particular monuments were constructed, or data which was not required in previous years (e.g. GPS coordinates). The effect of the community work became a springboard for the development of a nationwide website. Today, each monument featured on the website has its own separate page, and Internet users can add information, upload photos and documents, and submit "non-encyclopedia" content, i.e. trivia, legends, or anecdotes. The overriding goal of the paper is to shed some light on the factors that motivate Internet users to engage in social crowdsourcing.

Keywords: social crowdsourcing, Open Monuments Project, motivation.

Słowa kluczowe: crowdsourcing społeczny, Otwarte Zabytki, motywacja.

Crowdsourcing and knowledge-sharing on the Internet

The advancement of the Web 2.0 concept has boosted social confidence in collaboration models based on openness, partnership, and global initiatives. The perception of an Internet user, who is no longer a mere passive consumer, has changed dramatically. Alvin Toffler coined the term "prosumer" [Toffler 1980]. Over the

last years, virtual communities have become increasingly active. In their attempts to define the phenomenon, scholars have started to use such terms as "commons-based peer production"[1] [Benkler 2006], "collective intelligence"[2] [Lévy 1994: 13], "wisdom of crowds"[3] [Surowiecki 2004], "wikinomics"[4] [Tapscott, Williams 2006, 2010] and "crowdsourcing". Internet users are eager to contribute to innovation and to share information, knowledge, and resources. They take action on a global scale and believe in the principles of openness, equality, and partnership as the ones building the prevailing social order.

As a linguistic blend of the English words "crowd-resource-using", the term *crowdsourcing* became popular after the publication of Jeff Howe's article *The Rise of Crowdsourcing* in "Wired Magazine" in June 2006. Jeff Howe used this term to illustrate a common business practice of commissioning a dispersed group of Internet users to do certain jobs. Furthermore, Howe created the blog crowdsourcing.com, where he described the whole concept, providing numerous examples. However, there is no single official definition of crowdsourcing, mainly because there is no agreement among researchers on its scope. As Małgorzata Kowalska aptly observes, some scholars limit the meaning of this term to only certain types of on-line behavior. Others often use it to refer to any kind of cooperation-based activity of Internet users. In addition, some authors treat the term only as synonymous to "wikinomics", "prosumption", "wisdom of crowds", and "collective intelligence" or as yet another neologism describing the phenomenon characteristic of the Web 2.0 [Kowalska 2015: 118–119].

Jeff Howe – author of the term – defines crowdsourcing as: "the act of taking a job traditionally performed by a designated agent (usually an employee) and outsourcing it to an undefined, generally large group of people in the form of an open call" [Howe 2006]. Howe ascribes the growth of crowdsourcing to the rise of the open source trend. He emphasizes, however, that it is not technology but people (creative "crowd") who are a vital part of the phenomenon. The author also points out that crowdsourcing can take many forms, that is why he distinguishes four basic models: 1) collective intelligence – problem-solving done by a crowd; 2) crowd-creations – value creation by a crowd; 3) crowdvoting – asking Internet users to

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[1] Bottom-up, non-economically driven collaboration of many people. The purpose of such partnerships is to exchange knowledge and information, and the only criterion to participate is knowledge and experience in a given field.

[2] "It is a form of universally distributed intelligence, constantly enhanced, coordinated in real time, and resulting in the effective mobilization of skills".

[3] The belief according to which the collective opinion of a large group of people is more accurate than the competences of a single person (an expert).

[4] The term defining the era of business cooperation, which is taking on a mass-scale, spontaneous nature, thus transforming the economic information exchange, value creation, and competition in the global market.

choose the best solution, collect opinions, and formulate judgments on topics; and 4) crowdfunding – community fundraising [Howe 2008: 5–7].

Daren C. Brabham is another researcher commonly referred to as the chief promoter of crowdsourcing. In his 2013 book, outlining his views on the phenomenon, Brabham defines crowdsourcing as "an online, distributed problem-solving and production model that leverages the collective intelligence of online communities to serve specific organizational goals" [Brabham 2013: XIX]. According to Brabham, crowdsourcing should not be equated with "open-source production" or "commons-based peer production". Although openness and using the Internet as a platform for cooperation are two common denominators of these phenomena, they differ in control mechanisms. Community-based and free software movements are initiated and controlled by the community itself. The crowdsourcing process, on the other hand, is organized and managed by a specific entity (organization, legal entity) and has a clearly defined purpose [Brabham 2013: 6–8]. For Brabham and Howe, crowdsourcing is a generic concept based on participatory culture and the bazaar [Raymond 1999] model of collaboration that uses collective intelligence of Internet users to reach a specific target set by an organization.

At this point, it is worth mentioning the observations made by Małgorzata Kowalska, who has made an in-depth analysis of the available crowdsourcing definitions[5] and noted that the way the concept is interpreted by numerous researchers is sometimes quite different. Therefore, Kowalska claims that the term should be defined in a broad and narrow sense of the word. In its broad sense, crowdsourcing is "any activity (online or offline) leveraging any kind of knowledge, skills, or financial resources of a general (online or offline) crowd in order to do jobs (for a fee or for free) specified in an open call (online or offline) by a private individual, institution, non-profit organization, or company". In a narrow sense, crowdsourcing is "any activity of heterogeneous virtual communities in which they use their knowledge, skills, or assets to do jobs of a certain degree of complexity (for a fee or for free) via the Internet, and the jobs are commissioned in an open call and supervised by a private individual, institution, non-profit organization, or company" [Kowalska 2015: 145].

The concept of crowdsourcing can be used in a variety of areas related to business, innovation, science, culture, etc. Since the goals are fundamentally different, the desired resources are very diverse, ranging from creativity, commitment, knowledge and experience, to money. In simple terms, there is commercial and social crowdsourcing. The first one is used by companies for many purposes, e.g. to enhance products or look for new solutions. Social crowdsourcing is about supporting

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[5]　The research done by the paper author in June 2015 shows there were 1,762 available publications with the keyword "crowdsourcing" at the time.

universally useful non-commercial initiatives, where the effects of Internet users' work are freely available to everyone [Pluszyńska 2014: 310].

By referring to the abovementioned definitions, the author of this paper will present the Open Monuments Project – a pioneer project premised on the idea of crowdsourcing in its narrow sense, applied on a large scale by a non-profit institution in order to support culture in Poland.

Who is involved in a crowdsourcing campaign?

There are three actors playing a major role in an online crowdsourcing campaign: Initiator (also called a crowdsourcer, originator, or beneficiary), Platform, and Crowd (an online community).

In the vast majority of cases, crowdsourcing campaign initiators include profit-oriented companies and businesses. However, apart from business entities, virtually anyone can become a crowdsourcer: an individual, a group of people, a public institution, or a non-profit organization. The initiator specifically defines the goal of the campaign, project scope, schedule, and any reward in return for participation or best solutions. During the campaign, the initiator keeps motivating the participants and oversees the course of the project so that it complies with the predefined project details.

An Internet crowdsourcing campaign must be carried out via an electronic platform – a dedicated website. These are usually professional platforms, although they vary. Based on available literature, Dariusz T. Dziuba devised a typology of platforms, dividing them according to five groups of criteria [Dziuba 2012: 33–36]:

1) area of interest: a) universal platforms that act as intermediaries in finding different types of jobs, and b) specialized platforms targeted at delivering very specific jobs from different spheres of economy;
2) scope: a) global platforms; and b) local platforms;
3) job type: a) micro-jobs (simple jobs), b) macro-jobs (complex jobs);
4) technology: platforms that make it possible to partake in crowdsourcing campaigns via a) www systems, b) mobile devices, and c) mixed systems;
5) initiator's strategy: a) open (external) platforms aimed at collaborating with Internet users, and b) closed (internal) platforms dedicated only to employees and business partners of a particular institution.

Although the goal of a crowdsourcing campaign drives the actions of all crowdsourcing actors and thus plays a vital role, yet the "crowd" is of primary importance. A virtual community comprises of Internet users, who capitalize on their knowledge and skills to solve tasks, co-create new products and services, process large amounts of data, share their ideas and tips, and collect funds. Crowdsourcing campaigns attract professionals and amateurs living in different parts of the world.

They usually become involved in such projects after their working hours, devoting not more than one hour.

The concept of crowdsourcing is based on the wisdom of crowds idea formulated by James Surowiecki. The originator of this theory claims that problem solving done by a large group of people with different knowledge and experience yields far better results than relying on the creativity of individuals. Still, the power of crowd wisdom is not about a group consensus but about independence and ingenuity of the individuals who make up the community [Surowiecki 2004]. Jeff Howe notes that crowdsourcing participants constitute a very diverse group, and diversity is one of the most important innovation factors – it is inspirational and stimulating [Howe 2008: 56].

Crowd motivation factors

For a crowdfunding project to succeed, the initiator should familiarize themselves with the crowd's main motivators and provide incentives that will make people want to get the job done. Internet users engaging in crowdsourcing projects are driven by numerous factors. According to Enrique Estellés-Arolas and Fernando González--Ladron-de-Guevara, they take on tasks in order to satisfy their economic or social needs, gain recognition, boost their self-esteem, or develop their skills [Estellés--Arolas, González-Ladron-de-Guevara 2012: 197]. Daren Brabham's opinion is that money is only one of the motivators, but not the most important one. Internet users become involved in crowdsourcing projects for the pure joy of problem-solving, in order to gain new skills, to find a better job, or to land freelance jobs. Another motive is the fact that they get the chance to spend their free time in a productive manner [Brabham 2008a and 2008b].

The self-determination theory, put forward by Edward Deci and Richard Ryan, distinguishes two main types of motivation. Intrinsic motivation (the so-called Harlow's drive) is an individual's drive to fulfill his or her personal needs by performing a specific activity that is not subject to the laws of logic or economics, because its main impetus is creativity, one's desire to test their skills, internal satisfaction, or a form of leisure. Extrinsic motivation is characterized by the desire to achieve a particular result: to get rewarded or to avoid punishment [Deci, Ryan 2000: 71]. Examples of reward include physical and monetary rewards, the chance to improve skills for current or future work, or a sense of belonging to a community (identifying with specific values or approving specific social norms) [Krawiec 2014: 18–19].

Although the source literature emphasizes the crucial role of both motivation types [Brabham 2008b; Brabham 2009: 242–262, Krawiec 2014; Kowalska 2015: 154], according to some of the motivation researchers, Daniel Pink in particular, intrinsic motivation is more effective for tasks that require creative thinking, while extrinsic motivation comes into play for repetitive tasks [Pink 2011].

Since Internet users relatively rarely engage in crowdsourcing simply under peer pressure or only to avoid punishment, their motivators predominantly include positive incentives [Mazurek-Łopacińska, Sobocińska 2016: 180]. One crucial motivating factor is the opportunity to satisfy one's non-material needs, especially to improve current skills and acquire new ones. Undoubtedly, if a crowdsourcing campaign is to succeed, it is essential to take the aspect of motivation into account. The process of creating solutions must be fun, otherwise the initiator is doomed to fail [Krawiec 2014: 21].

The open monuments project

The Open Monuments Project is coordinated by the Digital Center, which is part of the Projekt: Polska Association[6]. The main objective of the project is "to build a civic directory of monuments based on the state register data and to co-create an online database of information about Polish monuments" [Pluszyńska 2014: 313].

The project was inspired by the Wiki Loves Monuments photographic competition, organized by Wikipedia Poland under the auspices of the National Heritage Board of Poland and partnered by the Digital Center. The main objective of the contest was to take pictures of all immovable historical monuments included in the Register of objects of cultural heritage [https://otwartezabytki.pl/].

On 3 December 2011, on the initiative of the Digital Center and as part of the Open Data Day, 72 people checked and updated the basic data available in the Polish nationwide register of monuments (i.e. names, addresses, dates of creation, and GPS coordinates of the monuments). The lion's share of the project participants worked remotely. Within one day, 1,600 database changes, 700 line approvals, 925 geolocations, and 270 street names were entered [Kowalska 2012: 227].

The Open Monuments Project started in summer 2012 and had two stages. Initially, the so-called Social Digital Initiative resumed the work initiated in December 2011. The Digital Center provided an online tool that the Internet users exploited to create a "civic directory of monuments", i.e. they checked and updated the basic monument data that could be found in the state register. As a result, data on almost 8,000 monuments was updated, which means the volunteers managed to verify 10% of the entire database. The database updates were accompanied by smaller-scale social initiatives launched by the members of the Project: Poland Association in ten Polish cities, including walks, during which participants could acquaint themselves with the local monuments entered in the register of monuments and then team up to update the monument database [Pluszyńska 2014: 313].

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[6] Projekt: Polska includes: Projekt: Polska Foundation and Projekt: Polska Association.

The above initiative attracted more than 7,000 people and was a success, which spurred its further evolution. The outcome of the project's second phase was a nation-wide web portal (see below). Its creators factored in users' suggestions and expanded the data updating tools with new functionalities and content (such as description, tags, photographs, history, legends, anecdotes, etc.) [Kościelniak, Brendzel-Skowera 2014: 149]. If users want to add information about monuments on the otwartezabytki.pl website, they simply create an account, find the monument they are interested in by name or location, and then add their information or photos. It is also possible to add data using a special application available for smartphones.

Photo 1. Website of Open Monuments Project

Source: https://otwartezabytki.pl/ [access: 15.11.2017].

In addition to freely editing the directory, it is possible to create interactive maps, add new sites and buildings (including the ones abroad) worthy of the monument status to the shared directory (such monuments are in the "community-added" cate-gory, and any Internet user can become a "virtual guardian" of the profile of such a monument), and monitor and report on the condition of the monuments. (In-formation thus collected is sent to the National Heritage Board of Poland, which declares to include this information and take appropriate action) [Pluszyńska 2014: 314; Kościelniak, Brendzel-Skowera 2014: 149; Pawłowski, Wiśniewski 2013: 318]. In 2014, the project was praised by Internet users and won the first prize in the contest "Discover e-volunteering" [http://konkurs.e-wolontariat.pl].

The Open Monuments Project is addressed not only to professionals, but to all those interested regardless of education, age, and place of residence. The coordinators keep trying to involve other communities. They directly appeal to individuals, e.g. monument lovers, local activists, Social Guardians of Monuments, employees of non-governmental organizations, cultural institutions and public institutions (e.g. the Polish Institute of National Remembrance), local governments, representatives of the Polish diaspora, and the media for updating monument profiles using their own resources. The project organizers are approached by various people, including tourists, tour guides, animators, students, seniors, teachers, scouts, and software developers, who like the idea behind the digital social initiative [Pluszyńska 2014: 314; Sawko, Wilkowski 2012]. The initiators of the project also perform educational and animation activities, encouraging Internet users to engage in the digital protection of monuments in every corner of Poland [https://www.facebook.com/pg/OtwarteZabytki].

The name of the project is not accidental. "Open" means legally and without limits available to anyone. Project originators argue that "crowdsourcing is most effective when the results of collaboration become a common good freely available to all. Otherwise, the participants would not be able to trust the organizer, who could appropriate the final outcome and 'keep it locked' for their own use" [https://otwartezabytki.pl/].

The Digital Center is an organization that deals with copyright on the Internet and makes every effort to ensure that selected solutions in the project and the effects of cooperation with users are published in compliance with the law and, at the same time, reach the widest audience possible [http://e-wolontariat.pl]. As public information, the Register of Historic Monuments is not subject to copyright, hence it can be accessed and used freely. The content added by Internet users as part of the project is, however, published under the Creative Commons Attribution License, under the same conditions[7], which means it can be freely used, modified, copied, and shared with others without obtaining anyone's consent. In addition to content, the data editing tools, user-friendly applications, and source code of the entire website are also "open" [Pluszyńska 2014: 315].

Out of 41,794 registered monuments, 5,084 have been verified, 36,688 remain unverified, and only 22 have been updated. The sights added by the community include 1,019 monuments, only half of which have been verified (533)[8]. In this case, it would be an overstatement to say that the otwartezabytki.pl website is a source of knowledge. Most of the monument profiles are empty or contain only bare metrics. On the other hand, the most important objective of the project is for Open Monuments

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[7] The condition to use this content is to provide information about the author and publishing the work created based on the obtained material under the same license.

[8] Status as at 27 August 2017.

to become a comprehensive source of knowledge. If it does, it might become an inspiration to explore more possibilities, e.g. for educational purposes. The coordinators also emphasize that no expertise is needed to participate in the project. All that is needed is reliability and good intentions. There is a user-generated content verification system based on peer review. Each entry is confirmed by three independent Internet users before being approved and published [http://e-wolontariat.pl].

There is still a lot to be done. The Open Monuments Project is Poland's pioneering cultural crowdsourcing initiative with an indefinite deadline. It is therefore worthwhile exploring why Internet users engage in the project and what drives them to share their knowledge and information. The research conclusions will also make it possible to formulate recommendations for further project development.

Motivation in the open monuments project – research results

The aim of the research carried out by the author was to identify the factors motivating the users of the "otwartezabytki" website to travel around Poland and to share their knowledge. The author tried to answer the following research questions: "Why do Internet users participate in the project?", "How often do they complete the information on the website and what kind of monuments do they usually describe?" and "Does the fact of getting involved in the project correlate with their passion for travel?". Furthermore, the author's goal was to formulate recommendations for actions that would promote the project and encourage active cooperation.

In order to examine the indicated fragment of reality, the author applied a survey method, and the data was collected with a questionnaire. The questionnaire consisted of thirteen single and multiple-choice questions, including closed- and semi-ended ones. The questionnaire was sent by e-mail to the users of www.otwartezabytki.pl

The online survey conducted among the users of otwartezabytki.pl was held from 24 April to 7 May 2017 in cooperation with project coordinator Ewa Majdecka from the Digital Center. During this period, there were 2,900 registered users, but many of them were fake ("spam") accounts. 225 people took part in the survey, 150[9] of whom answered all questions[10]. (Only the fully completed questionnaires were included in the analysis.)

The research involved 72 women and 78 men. Most of them were 30–35 and 42–50 years old (see figure 1).

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[9] The answers obtained for individual questions are not included in this number, because some of them gave the respondents the possibility of multiple choice.

[10] 5,2% of all the respondents.

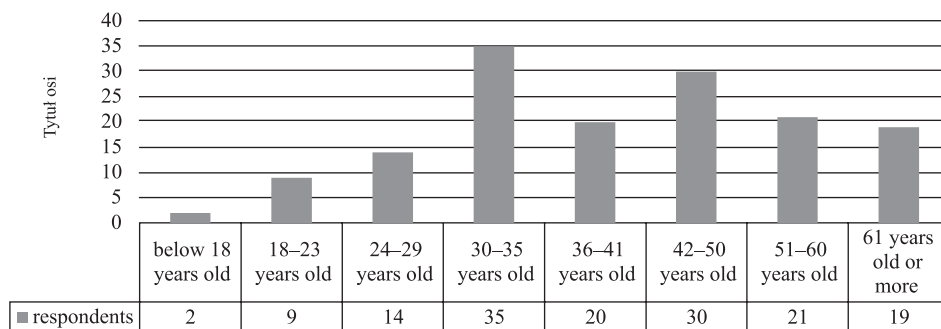|	below 18 years old	18–23 years old	24–29 years old	30–35 years old	36–41 years old	42–50 years old	51–60 years old	61 years old or more
■ respondents	2	9	14	35	20	30	21	19

Figure 1. Age

Source: author's own work.

Less than 30% of the participating Internet users were inhabitants of very large cities. The remaining respondents lived in rural areas (13%) and small towns (28,6%). The survey was also filled by 7 respondents who did not live in Poland (see figure 2).

	village	town up to 20k people	town 20–50k people	town 51–100k people	city 101–250k people	city 251–500k people	city above 500k people	I don't live in Poland
■ respondents	20	24	19	15	9	12	44	7
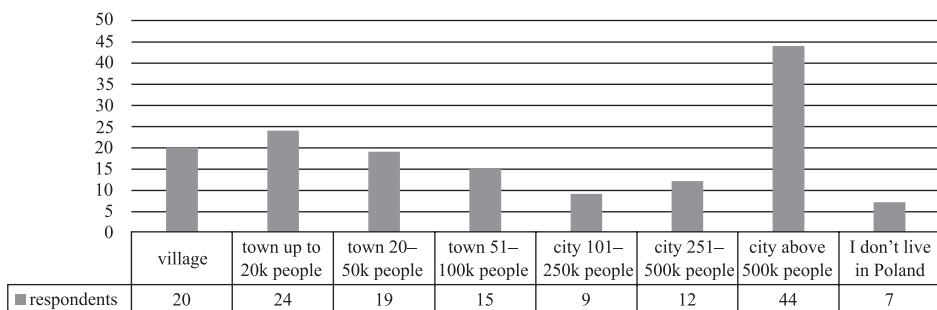
Figure 2. Place of residence

Source: author's own work.

The vast majority of respondents declared having a university education (66,8%) (see figure 3). The respondents with a bachelor's degree constituted 15%. There were 1,3%, 10,4%, and 6,5% of the respondents with junior high, secondary, and incomplete education, respectively. None of the respondents had elementary education. The fact that it is the users with higher education who get involved in the project may be due to their better digital skills, easier access to the Internet, and even greater sense of responsibility for the common good.

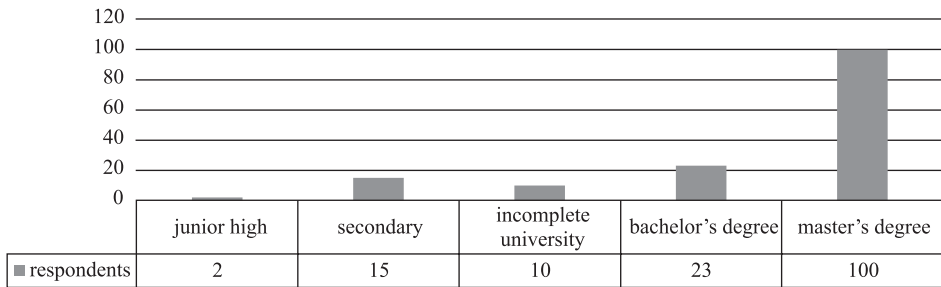|	junior high	secondary	incomplete university	bachelor's degree	master's degree
■ respondents	2	15	10	23	100

Figure 3. Education

Source: author's own work.

The users were also asked about their current permanent employment (multiple choices). Research shows that more than 75% of the respondents had a steady job, which corroborates the rule saying that the community usually participates in crowdsourcing projects in their free time. Those who marked the answer "other" stated that they were self-employed or freelancers (see figure 4).

	I have a steady job	I do odd jobs	student	stay-at-home	job seeker	unemployed-not looking for a job	retired/pensioner	other
■ respondents	113	13	22	11	6	3	14	3
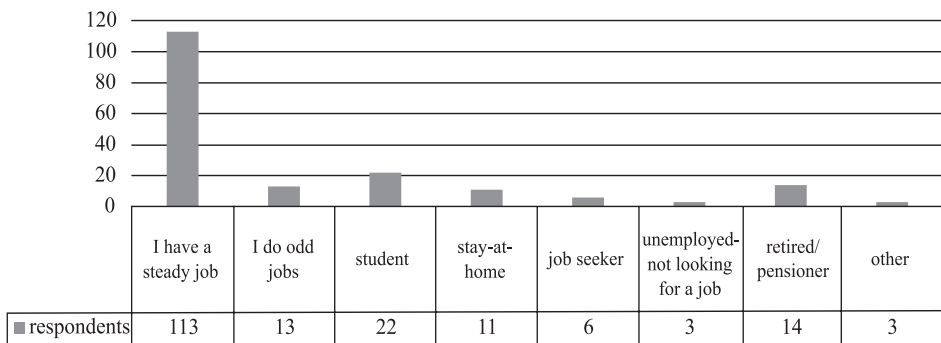
Figure 4. Current permanent job

Source: author's own work.

More than half of the site users declared that they had been involved in the project for at least a year, 38 of whom from the very beginning of the initiative. Hence, the website operation is primarily premised on the work of regular users (see figure 5). There is also an increase in the number of people registering on the website just to share their knowledge. Ergo, the crowdsourcing project continues to enjoy some popularity.

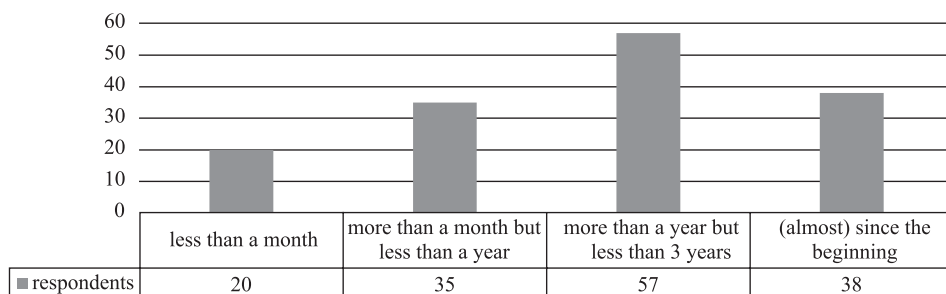| ■ respondents	less than a month	more than a month but less than a year	more than a year but less than 3 years	(almost) since the beginning
	20	35	57	38

Figure 5. How long have you been involved in Open Monuments?

Source: author's own work.

The number of users and the period of involvement in the project do not translate into the amount of information provided. The study indicates that 65% of the respondents had updated the information on the website only once, while 23% had not added any information. Active Internet users made up only 6% (see figure 6). The project coordinators claim that such low involvement of Internet users is due to their sense of lack of sufficient competence and their belief that engagement in the project requires expert knowledge, whereas, in fact, knowledge of the monuments is dispersed and often also locally available. Internet users may also be overwhelmed by the size of the task. There are more than 75,000 objects in the database in total, of which less than 10,000 are added [http://grywalizujemy.pl].

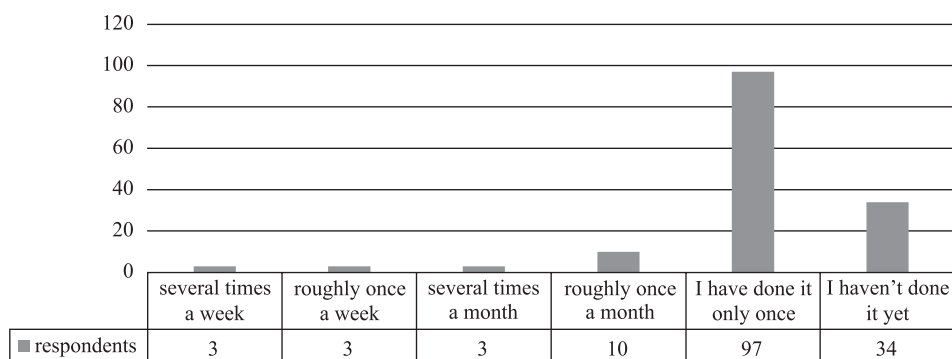| ■ respondents	several times a week	roughly once a week	several times a month	roughly once a month	I have done it only once	I haven't done it yet
	3	3	3	10	97	34

Figure 6. How often do you update the information on the website?

Source: author's own work.

When asked why they partake in the project, the surveyed users could choose up to three answers by determining their importance. The most important reason was for the information about the monuments to be available to anyone. In addition, Internet users got involved in the project, because they wanted to keep the memory of the monument alive or were interested in historic sights (see figure 7). Similar answers ranked second (marked "important") and third (marked "less important"). It implies that the project attracts people who give priority to a free access to monument data. Another conclusion to infer is that the respondents do not perceive using the otwartezabytki.pl website as an opportunity to broaden their computer skills (0%) or a way to spend free time (0,7%).

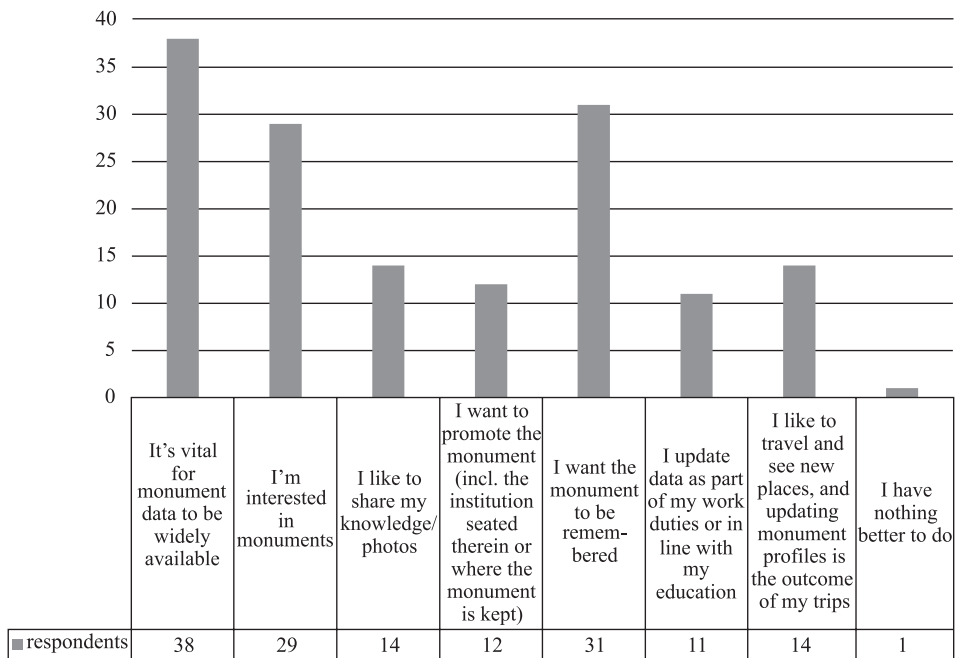|	It's vital for monument data to be widely available	I'm interested in monuments	I like to share my knowledge/ photos	I want to promote the monument (incl. the institution seated therein or where the monument is kept)	I want the monument to be remembered	I update data as part of my work duties or in line with my education	I like to travel and see new places, and updating monument profiles is the outcome of my trips	I have nothing better to do
respondents	38	29	14	12	31	11	14	1

Figure 7. Why do you participate in the project? – main reasons

Source: author's own work.

In the ranking on motivation to share knowledge, the first position (marked "very important") is occupied by the following reasons: desire to promote an interesting monument; sense of creating something new; conviction that it is worth sharing knowledge with others; and desire to participate in an interesting project (see figure 8). Similar responses prevail on the second and third position. Moreover, the Internet users stressed that they were motivated by the opportunity to publish true, reliable, and confirmed information. They pointed out that many online sources were unreliable.

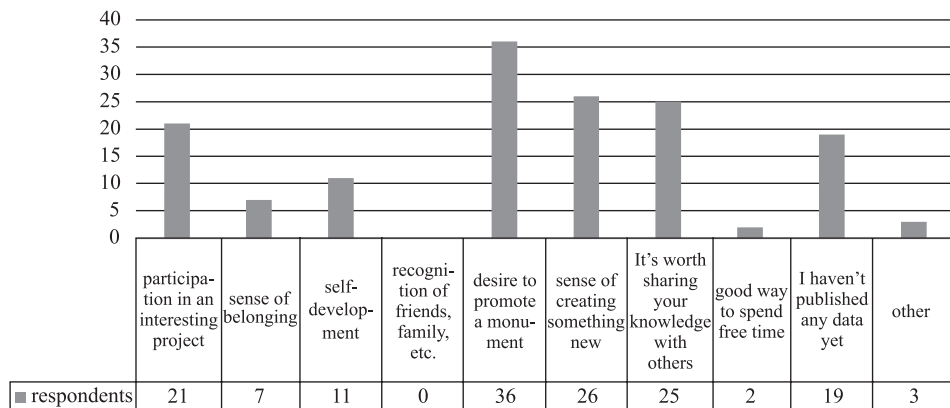| respondents	participa-tion in an interesting project	sense of belonging	self-develop-ment	recogni-tion of friends, family, etc.	desire to promote a monu-ment	sense of creating something new	It's worth sharing your knowledge with others	good way to spend free time	I haven't published any data yet	other
	21	7	11	0	36	26	25	2	19	3

Figure 8. What motivates you to share your knowledge with others – key motivator

Source: author's own work.

It is worth pointing out that: desire to be recognized by others, good way to spend free time, and sense of belonging were not the key motivators.

The site users admitted that they usually described monuments they had known for a long time (46%) or which were located near their home (45%). Therefore, they shared the knowledge they had or were able to easily acquire (see figure 9).

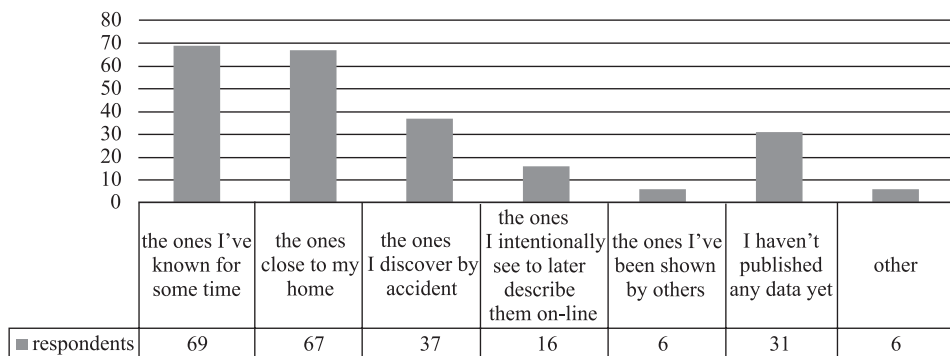| respondents	the ones I've known for some time	the ones close to my home	the ones I discover by accident	the ones I intentionally see to later describe them on-line	the ones I've been shown by others	I haven't published any data yet	other
	69	67	37	16	6	31	6

Figure 9. What kind of monuments do you usually describe?

Source: author's own work.

A small percentage (11%) included people who visited sites with the intention of describing it on the website. A larger part (25%) of the respondents updated data about monuments which they had discovered by accident. Compared with the question about the reasons for engaging in the project, this data is interesting.

As a reminder, 27% of the users like to travel and visit new places, and completing the profiles of monuments is just the result of their trips. According to the author, the next question about the respondents' motivation to travel across Poland is more promising. Namely, 98% of the website users admitted to enjoying travelling around Poland. Furthermore, 53% of them replied that they were interested in art, culture, and history, and 47% preferred to visit cities/towns and see monuments (see figures 10 and 11). It is worth capitalizing on this potential and take steps towards encouraging Internet users to share their intelligence and resources (e.g. photos) obtained during their private journeys on otwartezabytki.pl, especially since Internet users themselves believe that knowledge sharing is useful.
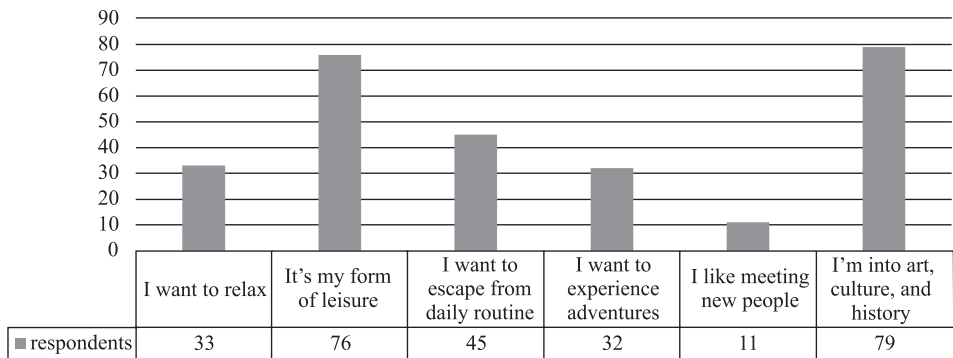
	I want to relax	It's my form of leisure	I want to escape from daily routine	I want to experience adventures	I like meeting new people	I'm into art, culture, and history
respondents	33	76	45	32	11	79

Figure 10. What drives you to travel across Poland?

Source: author's own work.

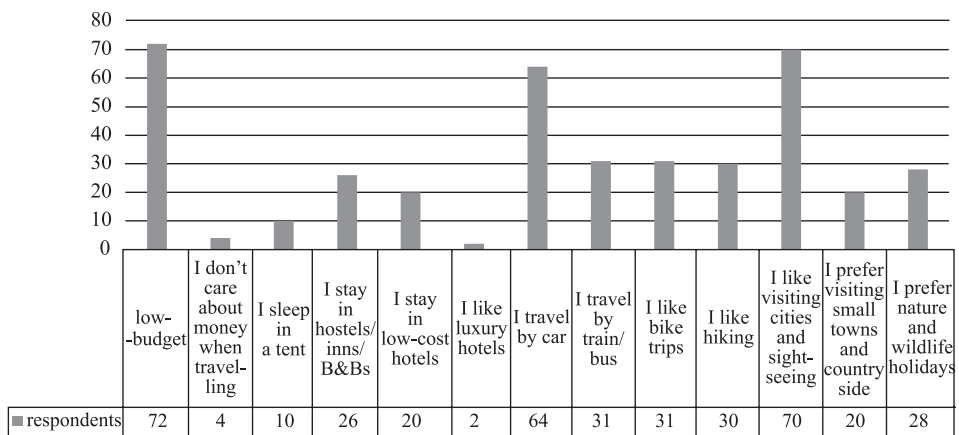|	low-budget	I don't care about money when travelling	I sleep in a tent	I stay in hostels/inns/B&Bs	I stay in low-cost hotels	I like luxury hotels	I travel by car	I travel by train/bus	I like bike trips	I like hiking	I like visiting cities and sightseeing	I prefer visiting small towns and countryside	I prefer nature and wildlife holidays
respondents	72	4	10	26	20	2	64	31	31	30	70	20	28

Figure 11. My preferred style of travelling across Poland

Source: author's own work.

Summary and recommendations

The aim of the author's research was to identify the factors motivating the users of otwartezabytki.pl to travel and share the knowledge they gain. The research questions posed in the introduction were answered due to the survey, which has shown that although Internet users partake in the project for many reasons, the following characteristic aspects appear in the foreground: on the one hand, Internet users want to preserve the memory of monuments and believe that monument information should be widely available. On the other hand, the emerging reasons are also of intrinsic nature: volunteers are purely interested in monuments and like to share their knowledge. The motivating factors are mostly extrinsic: participation in an interesting project; sense of creating something new; and desire to promote monuments.

Although the crowdsourcing-based Open Monuments Project is addressed to anyone, the study shows that the majority of participants have a university degree. In line with the theoretical background, most Internet users spend their free time on the project occasionally, outside their regular jobs. Furthermore, the website users acknowledge that their involvement is primarily a one-time activity. One-off initiatives are all the more surprising that many users (63%) stated that their involvement in the project had continued for at least a year. It is therefore worth thinking about how to motivate those who like the initiative to share their knowledge more often. What is more, a high percentage of new users can be observed, which would imply that the project still enjoys a lot of popularity. Therefore, it is necessary to take action to make them want to stay in the project for longer. It is also worth continuing promotional activities to attract others.

Usually, the website users describe monuments that they know well or that are close to their home. Hence, they share their knowledge with others. It is worth coming up with ways to encourage them to search for information and then share it on the website.

It is also interesting that the respondents declared their passion for traveling across Poland. In addition, their declared preferred activity is sightseeing. It seems, however, that in order to achieve the goal of creating a complete database of monument, internet users should acquire new messages from different sources. That is why, it is recommended to take steps to motivate Internet users to share their knowledge and resources (e.g. photos) gained during their private trips.

The research carried out by the author was an attempt to categorize the users as well as their motivators and activities. Indirectly, it also investigated the popularity of the website. It seems reasonable to expand this study in the future qualitatively and check: which types of data are most often added; the quality of the created metadata and uploaded photos; what the reception of this website among Internet users is; and what content they use most often. A comparative study juxtaposing this project with similar projects abroad could also be interesting. In this case, one could try

to define a model for the participation in similar projects and develop appropriate forms of promotion or even gratification (points, prizes, participant statutes, etc.)

Although the project has been running for several years now, the scale of Open Monuments is still insignificant. There is, however, a considerable potential for development that is only waiting to be tapped into. For this purpose, it seems necessary to repeat the research sometime in the future in order to check the increase in resources and the number of active users, and also to re-assess user motivation and the level of user commitment.

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Appendix: The questionnaire form

Dear Sir or Madam,
We would greatly appreciate it if you could devote a moment of your time to completing our online survey on the factors motivating the users of otwartezabytki.pl to travel across Poland and share their knowledge. The survey is addressed to all users of the website. The survey is anonymous, and the results will be used to develop the website further and to write a scientific paper.
It will take only several minutes to complete the survey. It consists of 13 single or multiple choice questions. The survey will be available until May 7 (Sunday).

Thank you for your help and participation.
dr Anna Pluszyńska (Jagiellonian University)
Ewa Majdecka (Digital Center)

1. Sex
   - ☐ woman
   - ☐ man
2. Age
   - ☐ below 18 years old
   - ☐ 18–23 years old
   - ☐ 24–29 years old
   - ☐ 30–35 years old
   - ☐ 36–41 years old
   - ☐ 42–50 years old
   - ☐ 51–60 years old
   - ☐ 61 years old or more
3. Place of residence
   - ☐ village
   - ☐ town up to 20k people
   - ☐ town 20–50k people
   - ☐ town 51–100k people
   - ☐ city 101–250k people
   - ☐ city 251–500k people
   - ☐ city above 500k people
   - ☐ I don't live in Poland
4. Education
   - ☐ elementary
   - ☐ junior high
   - ☐ secondary
   - ☐ incomplete university

    ☐ bachelor's degree
    ☐ master's degree

5. Current permanent job. You can choose more than one answer.
    ☐ I have a steady job
    ☐ I do odd jobs
    ☐ student
    ☐ stay-at-home
    ☐ job seeker
    ☐ unemployed/not looking for a job
    ☐ retired/pensioner
    ☐ other

6. How long have you been involved in Open Monuments?
    ☐ less than a month
    ☐ more than a month but less than a year
    ☐ more than a year but less than 3 years
    ☐ (almost) since the beginning

7. How often do you update the information on the website?
    ☐ several times a week
    ☐ roughly once a week
    ☐ several times a month
    ☐ roughly once a month
    ☐ I have done it only once
    ☐ I haven't done it yet

8. Why do you participate in the project? You can choose up to 3 answers. Please rank their importance, where the first top answer means "very important", and each subsequent one is "less important".
    ☐ It's vital for monument data to be widely available
    ☐ I'm interested in monuments
    ☐ I like to share my knowledge/photos
    ☐ It's a chance to enhance my IT skills
    ☐ I want to promote the monument (incl. the institution seated therein or where the monument is kept)
    ☐ I want the monument to be remembered
    ☐ I update data as part of my work duties or in line with my education
    ☐ I like to travel and see new places, and updating monument profiles is the outcome of my trips
    ☐ I have nothing better to do

9. What motivates you to share your knowledge with others? You can choose up to 3 answers. Please rank their importance, where the first top answer means "very important", and each subsequent one is "less important". If you choose "other", please write your own answer.

□ participation in an interesting project
□ sense of belonging
□ self-development
□ recognition of friends, family, etc.
□ desire to promote a monument
□ sense of creating something new
□ it's worth sharing your knowledge with others
□ good way to spend free time
□ I haven't published any data yet
□ other

10. What kind of monuments do you usually describe? You can choose more than one answer.
□ the ones I've known for some time
□ the ones close to my home
□ the ones I discover by accident
□ the ones I intentionally see to later describe them online
□ the ones I've been shown by others
□ I haven't published any data yet
□ other

11. Do you like to travel across Poland?
□ Yes
□ No

12. What drives you to travel across Poland? You can choose more than one answer.
□ I want to relax
□ It's my form of leisure
□ I want to escape from daily routine
□ I want to experience adventures
□ I like meeting new people
□ I'm into art, culture, and history

13. What is your preferred style of travelling across Poland? You can choose up to 3 answers.
□ low-budget
□ I don't care about money when travelling
□ I sleep in a tent
□ I stay in hostels/inns/B&Bs
□ I stay in low-cost hotels
□ I like luxury hotels
□ I travel by car
□ I travel by train/bus
□ I like bike trips
□ I like hiking

☐ I like visiting cities and sightseeing
☐ I prefer visiting small towns and countryside
☐ I prefer nature and wildlife holidays