DIGICULT

Digital presentation and preservation of intangible cultural heritage

O1 - Framework for common standards and models for digitization, presentation and preservation of intangible cultural heritage

NATIONAL DATA PROCESSING

BULGARIA

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Elaborated by	BFU (Bulgaria)
Activity related	T1-T2 National Data Processing
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Contents

1. State-of-the-art, expectations and competences needed questionnaire

1.1 Introduction

The questionnaire submitted on the 5th of March, 2020, was answered by a total of 29 respondents and had been designed to cover the following aspects of the sample:

General personal data;

- Experience in digitization of culture heritage/tourism;
- Skills/competences needed in digitization of culture heritage sector;
- Previous training in digitization of culture heritage/museum;
- Expectations from a course for digitization of cultural heritage/tourism.

27 questions in the questionnaire are multiple choice questions, as 2 of them allowed more than one answer, and 8 are open questions.

The survey was sent to 50 responents, from whom 29 have completed the survey. Therefore, the responding rate is 58%.

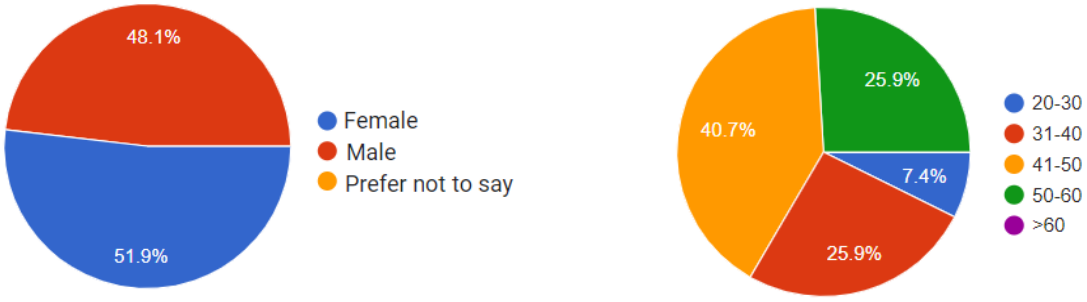
Below the detailed exposure and analysis of the data gathered in the order indicated above are presented.

2. Questionnaire analysis

2.1 General personal data

2.1.1. Gender and age

The analysis shows almost equal participation of the respondents by gender: 52% - women, 48% - men (Fig.1a). As to the age (Fig.1b), 41% of respondents are of 41-50 years old, equal participation (26%) of respondents by age groups 31-40 years and 50-60 years, and the resting part are the group of people of 20-30 years old (7%).



a) b)

Fig. 1 - Gender (a) and Age (b) characteristics of the sample.

2.1.2 Education level

According to the data processed almost half of respondents (56%) are with the Master degree, while the second are represented by the people with PhD/Post Doc (26%), and Bachelor degree (Fig.2 a).

As to the subject area of diploma (Fig.2 b), the prevalent topics of specialization revealed are: archaeology (32%), social studies (12%), history (8%) and etnology (8%). Other minor areas of specialization

are the following: cultural heritage management, museology, digitization/ICT, tourism management, art studies, philology.

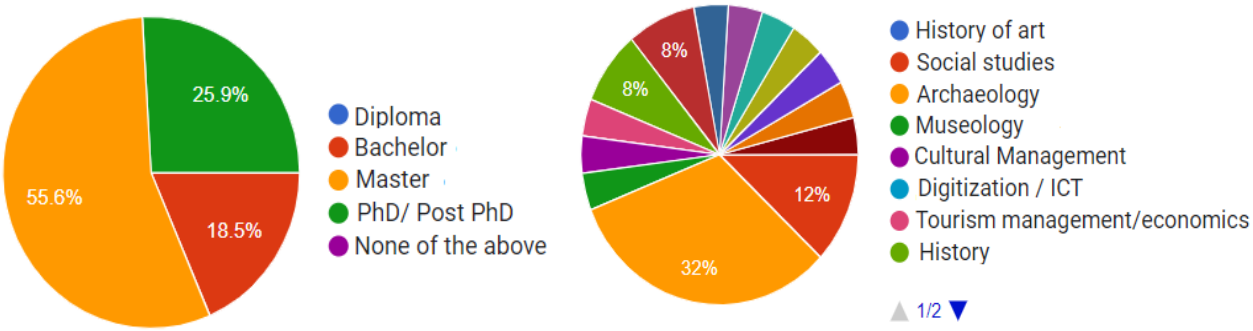


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Fig.2- Education level of respondents.

2.2 Experience in digitization of culture heritage/ tourism

2.2.1 Affiliations and positions held

The data reveal that 100% of the survey' participants work in museums (Fig. 3).

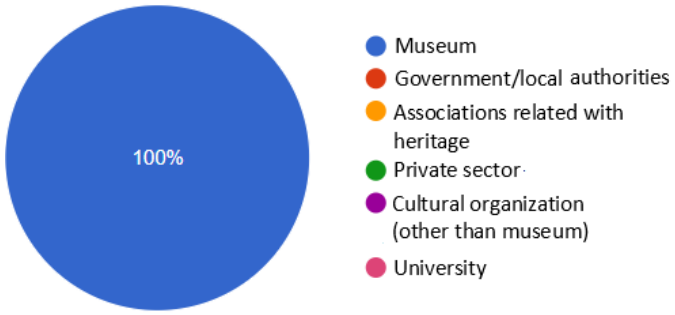


Fig. 3 - Affiliations.

As to the positions held, the list revealed is quite diverse, with employees predominant (46%). As can be seen from the Figure 4, the majority of respondents are employees, and the next two big groups are on managers and researcher (with 19% and 12 % of respondents correspondingly). The resting part of the sample is dominated by curators (8%).

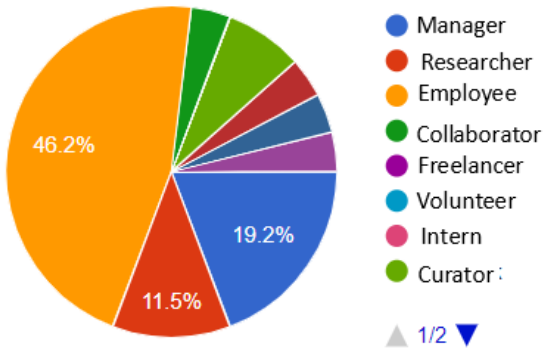


Fig. 4 - Positions held.

2.2.2 Working experience

The working experience inquiry has revealed that the majority of respondents had worked in museums for more than 5 years (89%). While the minor part - for less than 5 (8%) or 2 (3%) years (see Fig. 5).

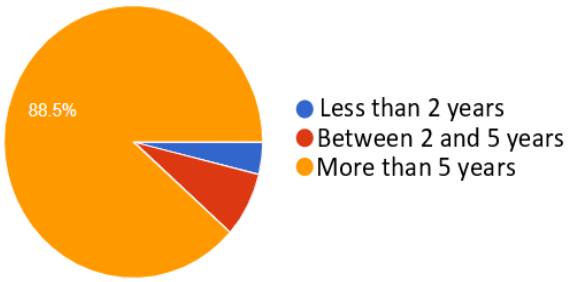
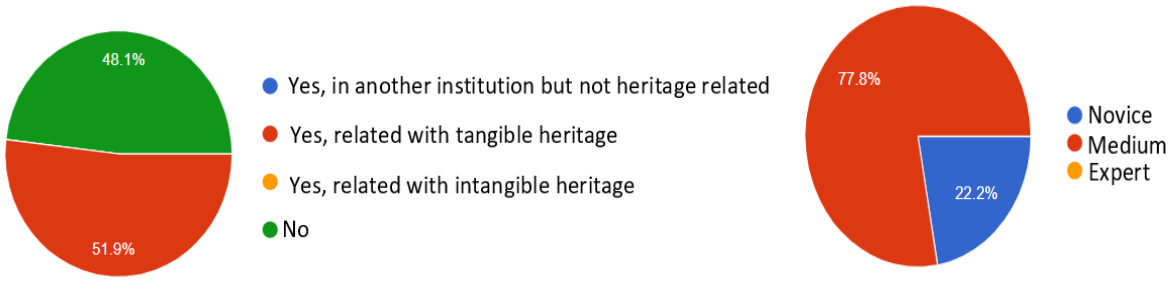


Fig. 5 - Working experience in years.

2.2.3 Previous experience in digitization and the tools used

Regarding previous experience in digitization, according to the data gathered, nearly a half of respondents have dealt with tangible heritage (52%), and to the resting part of respondents (48%) do not have any previous experience in digitization at all (Fig. 6 a).

As can be seen from the diagram in Figure 6 b, none of the interviewees seems to be an expert in technological tools / solutions. Most consider themselves to be medium users (78%).



a) b)

Fig. 6 – Previous experience in digitization (a) and the level of proficiency in technological tools/solutions (b).

As regards the types of technological tools used, a dominant group is an average computer user with standard skills of Office, Mail, Social Media use (65 %). The next main group is digital tool/equipment users with such basic instruments use as camera, drone, video/photo editing (31%).

2.2.4. The formats used for cataloguing and storage

The next open-ended question was answered by about 1/3 of the respondents. Because of that just the list of the formats and tools named will be provided without any quantitative insights. Among the image formats the following have been named: JPG, TIFF; audio/video formats – MP3, AVI; text – PDF. In addition, as the instruments used in cataloguing the following ones have been mentioned: Excel, Word, Power Point, PPS.

2.2.5 Cultural heritage legal framework awareness

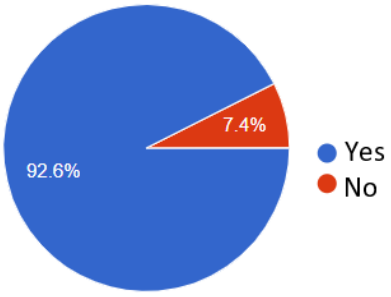


Fig. 7 - Do you know the legal framework for cultural heritage (tangible and intangible) in your country?

Of the 27 people answered the question "Do you know the legal framework for cultural heritage (tangible and intangible) in your country?" 93% answered "Yes" (Фиг. 7).

2.2. Skills/competences needed in digitization of culture heritage sector

When applied by a specialist in the cultural/heritage/tourism domain, the importance of the following skills has been assessed: Software/Computer use and Digital skills, followed by Network building skills and Innovation know-how. The data summarized in the figure below (Fig. 8).

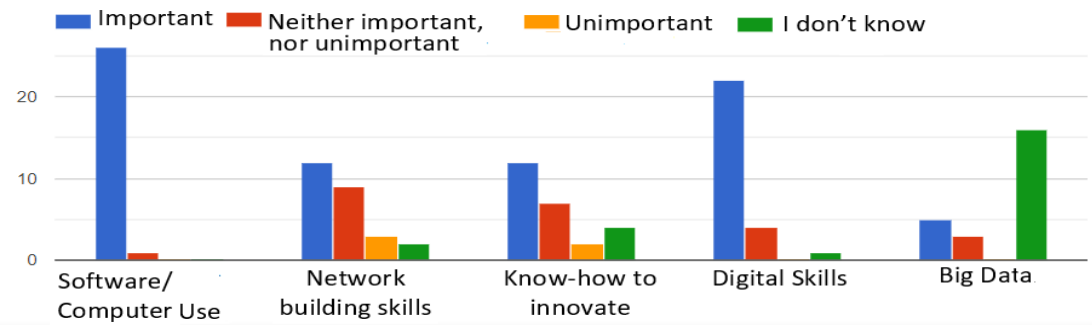


Fig. 8 - How important are the following skills/competencies in your work concerning technology?

As to Big Data, the results gathered demonstrate that this particular skill may be considered as rather partially controversial, than unimportant due to the maximum number of respondents (16) who selected “I don’t know”.

2.3.1 Digital Strategy Manager competences

Considering the professional competences of a Digital Strategy Manager, the inquiry was set in conformity with an extended scale providing the options ranging from “Very Important” to “I don’t know”. The total number of skills to estimate is 12. On Fig. 9 three corresponding diagrams (4 per each) are presented.

As reported in the Figure 9, among the most appreciable competences of a digital strategy manager for the respondents are analytical skills (69%) and creative thinking skills (69%), following by communication skills (62%), resilience (62%) and decision making (62%). A minor presence of respondents favored the “Unimportant” or “Don’t know” options for the most appreciable competences. As to the rest, despite of being assessed as slightly less important, the skills are still considered as “very important” or "important" by the majority of respondents.

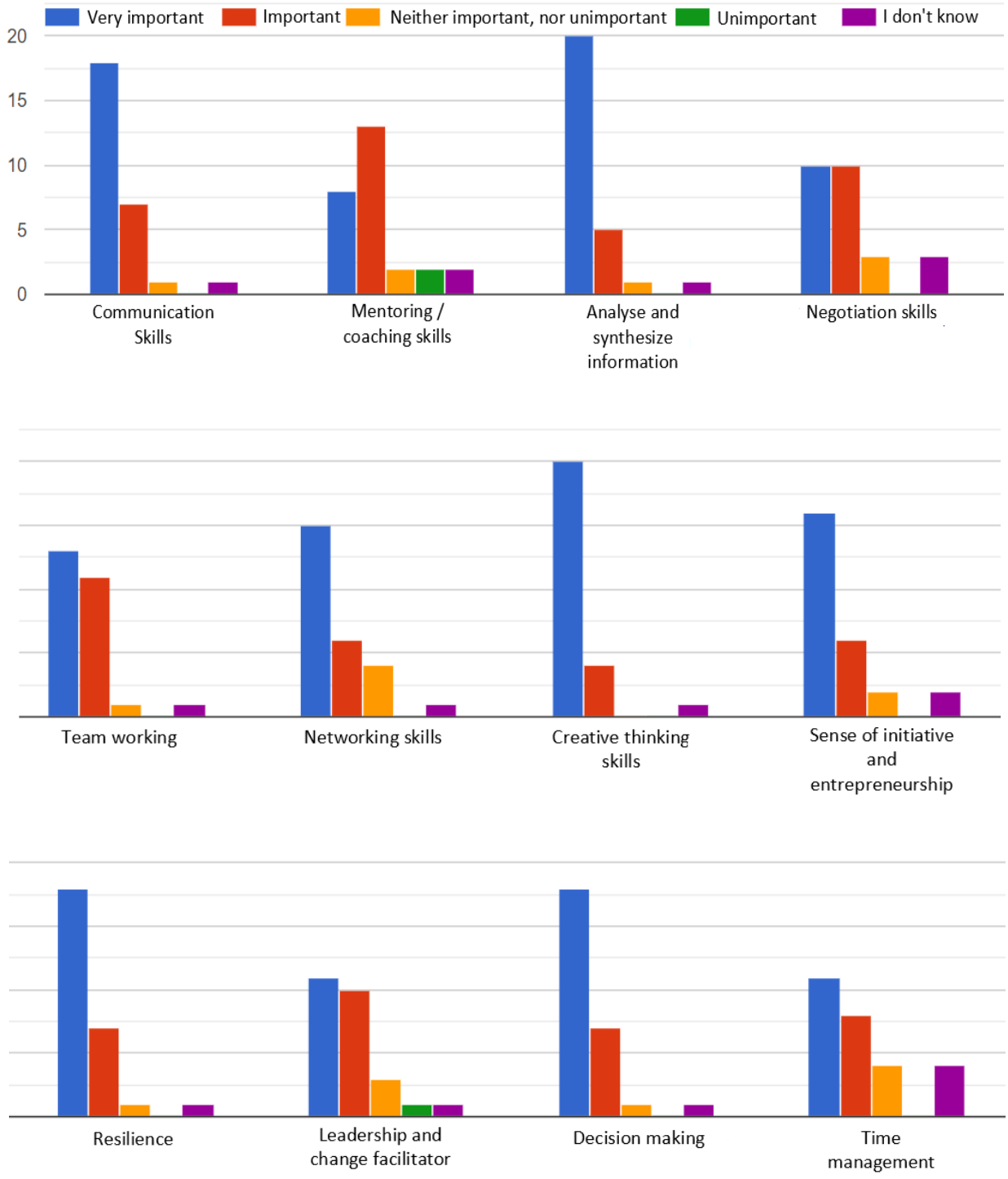


Fig. 9 - Competences a Digital Strategy Manager should have.

2.3.2 Digital Team's underrepresented skills

The dimension has been estimated by providing the respondents to choose up to three options from the ones reported below in the diagram with the corresponding number of the times each option was checked. The diagram (Fig. 10) displays the most deficient skill revealed is web/app development. The second classified group of underrepresented skills includes data management/analysis and e-commerce. The third classified group includes digital design and marketing, and multimedia production.

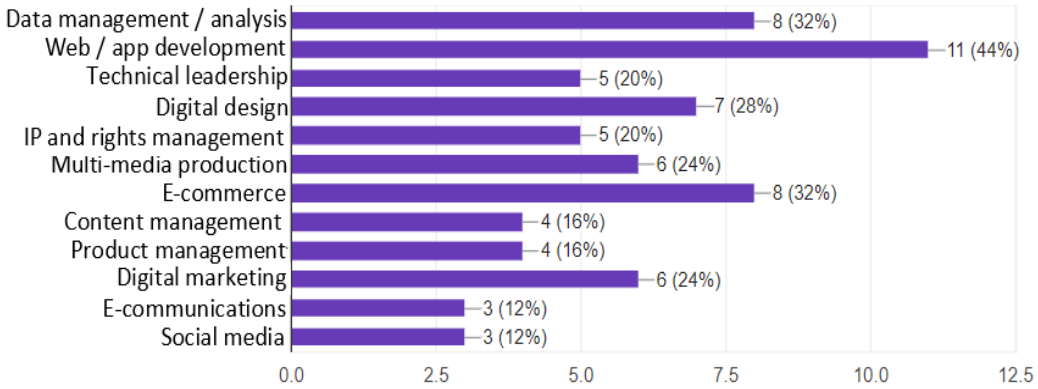


Fig. 10 - Which skills are underrepresented in your digital team?

2.3.3 Imaging solutions for digitization of intangible cultural heritage.

The question regarding the availability/necessity of the following imaging solutions for digitization of intangible cultural heritage was raised: scanning competences, photography and video making competences, 3D printing competence and operating the digitizing machines (e.g. copy stands). As results demonstrate, the most popular/demanded option is photography and video making competences with 42,4% of respondents. The second classified are the scanning competences (23,9%), the third one - operating the digitizing machines (20,7%). Moreover, 3 respondents actually don't have an idea for the kind of imaging solutions necessary for this particular task. While only 2 persons have specified 3D printing competences. The rest of respondents have singularly noted the necessity for different software, competences for audio phonic machines, and one respondent specified the necessity for all the instruments listed as response options.

2.3.4. The kind of digitization software used in the country

The question was answered only by 10 respondents. Half of the respondents have provided a reply of the type: “I don't know” and “I have no idea”. According to two of the respondents, the software used for digitization are: Epson, Excel, Accesspoint.

2.3.5 Video formats used for the digital representation of the intangible cultural heritage.

Similarly, to the previous inquiry, the question has been answered by 42 respondents, 15 of which don’t know any concrete answer. Nonetheless, among video formats mentioned, the respondents have named the following ones: MP3, MP4, MPEG4, mpeg, AVI, PDF, JPG, TIFF.

2.3.6 Copyright issues

Regarding the copyright issues on digitization and end use of digitized intangible objects, the results revealed demonstrate the sensitivity of the matter, notwithstanding the fact that the question has been answered by 10% of respondents as half of them answered "I don't know". The respondents are mention the followings copyright issues on digitization:

2.3.7 The tools to improve the work

As can be seen, from the given in red and blue sectors in Fig. 11 "Training for digital solutions (photo / video editing, 3D scanning / printing provided" (48%) and "Digitization equipment / training for use" (41%) as options have gained nearly uniform attention of the respondents.

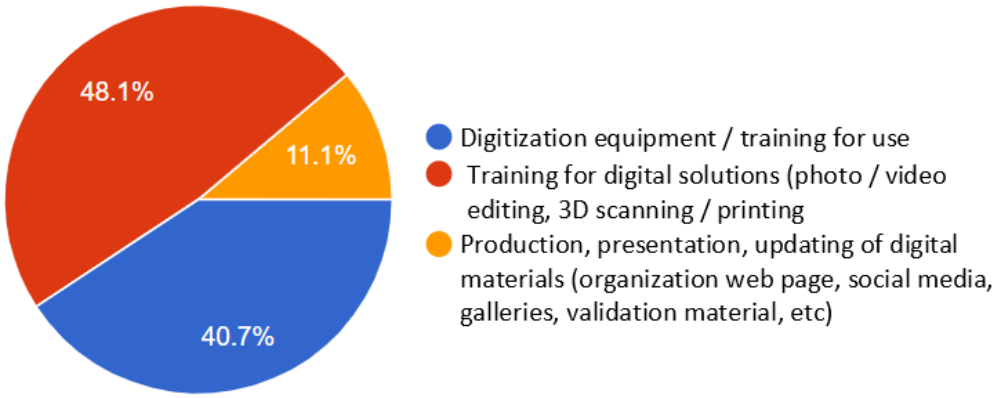


Fig. 11 - The tools that may improve the work regarding intangible cultural heritage.

2.3.8 Awareness on the guidelines for the cataloguing, preservation and presentation of intangible assets adoption.

According to the data gathered regarding the awareness on country's guidelines for the cataloguing, preservation and presentation assets adoption, the majority of respondents (92,3%) have declared "No", while the resting part, who said "Yes" has specified the following:

- At the Ministry of Culture of the Republic of Bulgaria a Register of IAUs has been created with corresponding entries, ordinance and methodology.
- No, no information has been provided to us as employees so far. What is more, we are not aware of a normative document that makes digitalization a universal task for cultural institutes

2.3.9 Previous experience in cataloguing of intangible assets.

As results show, 100% of respondents have no previous experience in the intangible assets cataloguing.

2.4 Previous training in digitization of culture heritage/museum

The inquiry on the participation in the heritage domain training programs during the last three years has revealed that 77,8% of respondents haven't took part in a such kind of activities, while for training in relation to ICH for culture heritage sector 100% have answered “yes”.

2.5 Expectations from a course for digitization of cultural heritage/museum

As can be seen from Figure 12, the most appreciable option for 21 respondents who have answered the question is hands-on sessions (77,8%). Practical tools or products (48,1%), study visits (40,7%) and talking with experts (37%) represent a significant interest for the respondents as well. As for analysing evaluation reports, research or studies, case studies and online resources the options have gained the interest of 4 – 5% of respondents.

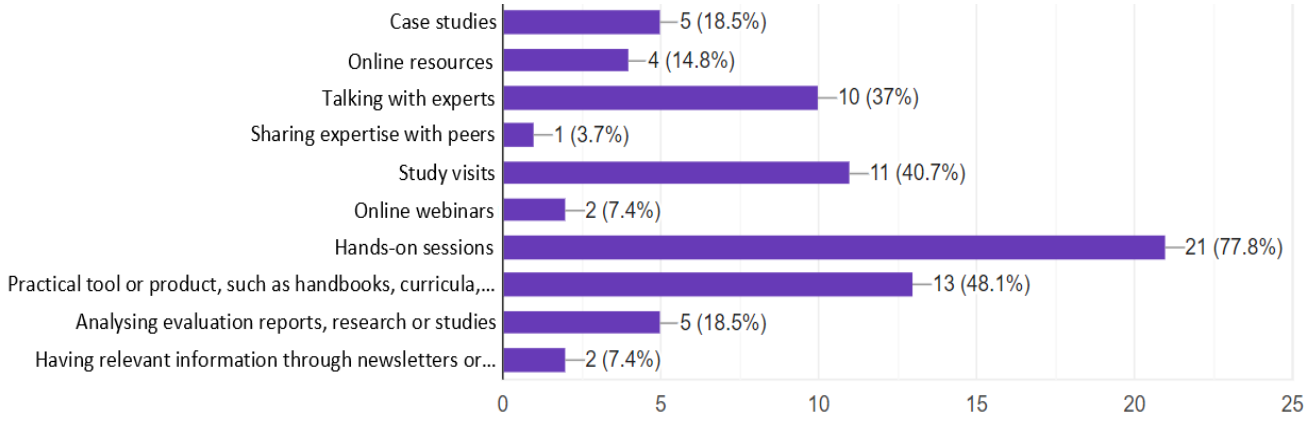


Fig. 12 – What do you appreciate in a training course?

As for the types of learning preferred, the resulting pie diagram is presented in Figure 13. Note, that the percentage provided is referred to 27 responses. According to the results achieved the final rating for first four in descending order of popularity looks as following: theme trainings; seminars; blended learning; workshop.

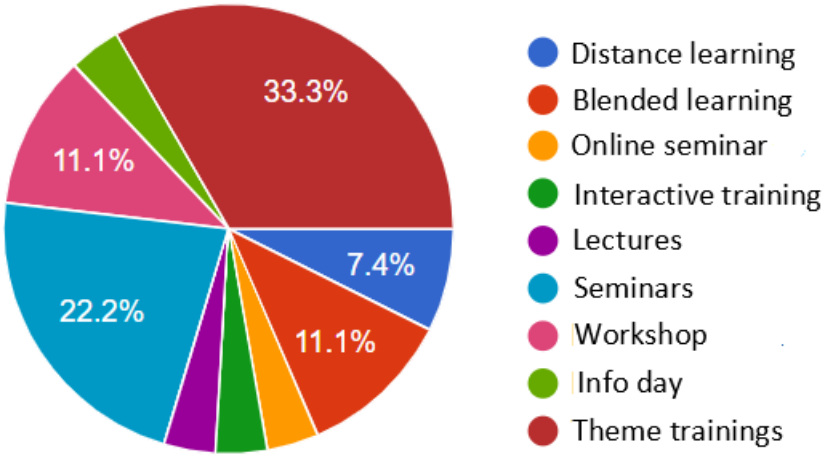


Fig. 13 – Types of the learning preferred.

Regarding the information respondents prefer to be covered during the training program in digitisation of intangible cultural heritage, the corresponding data revealed are summarized below on Figure 14.

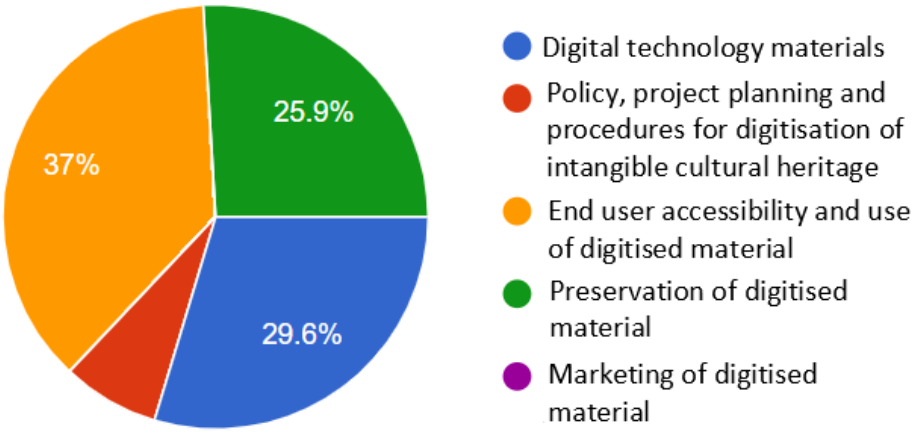


Fig. 14 – What kinds of needs are the most important and should be covered in training program in digitisation of intangible cultural heritage?

As can be seen, 37% of respondents would prefer the issues related to information about end user accessibility and use of digitised material. Information about digital technology materials (29,6%) and information regarding preservation of digitised material (25,9%) in turn, result to be equally quite interesting as well.

Finally, regarding the expectations from training in digitisation of cultural heritage/tourism, the answers are summed up in the diagram on Fig. 15.

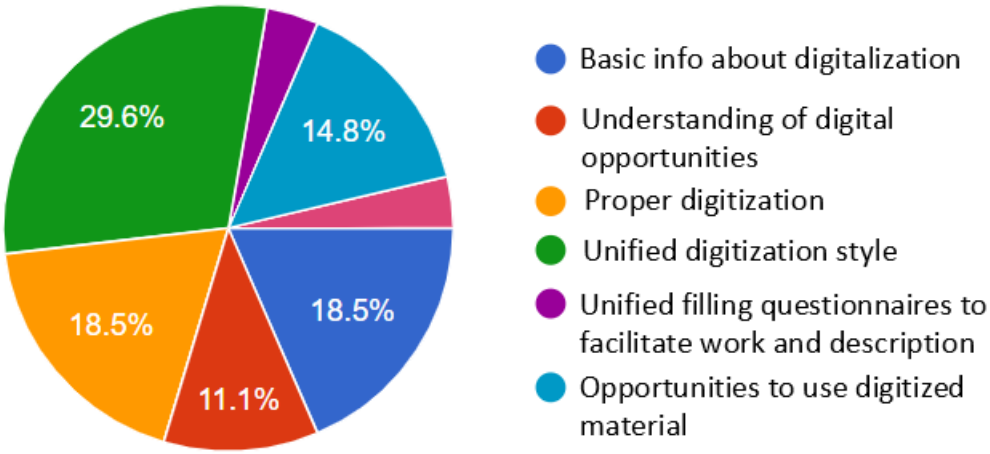


Fig. 15 – What would you expect from a training in digitisation of cultural heritage/tourism proposed by DigiCult?

First, worth noting that, from the results gathered, the option “Unified filling questionnaires to facilitate work and description” has obtained the maximum of votes (29,6%). From the other side, “proper digitization” together with “basic info about digitization” are second (18,5%) and "opportunities to use digitized material" is third (14,8%) classified in terms of the respondents’ attention gained.

The following conclusions can be drawn from the survey conducted in some museums in Bulgaria:

- the need for training in the field of digitisation of cultural heritage/tourism is clearly outlined;
- the main subject of such training should be related to end user accessibility and use of digitised material, digital technology materials and preservation of digitised material;
- as preferred types of trainings are theme trainings; seminars; blended learning; workshops.