



Digital presentation and preservation of intangible cultural heritage

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

NATIONAL DATA PROCESSING

LATVIA



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

1. *Introduction*

The questionnaire was answered by a total of 23 respondents and had been designed to cover the following aspects of the digitization aspects in Latvia :

- 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.

The analysis of the responses to the above presented questions is given below.

2. Questionnaire analysis

1. General personal data

2.1.1. Gender and age

The analysis has revealed the prevalence of female gender within the sample (Fig.1a), as in Latvia, like in most of EU countries, the proportion of women is higher in the cultural industries than in total employment. As to the age, 41 % of respondents are aged between 50-60 years old, where next employment group with 26% is 31- 40 years old, closely followed by 19% of 41-50 years old. Museum specialists younger than 30 and older than 60 are presented in 14% of cases.



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

2.1.2 Education level

According to the data processed nearly the half of respondents (48 %) are with the master degree closely followed by the bachelor degree holders, as many specialists have requirements for a certain level of formal education in a specialty corresponding to the museum's profile . Higher education diploma is set as a mandatory criterion for obtaining the status of a museum specialist. Only in 7% of cases museum worker is professional diploma holder. (Fig.2).

As to the subject area of diploma, the prevalent topics of specialization revealed are: social sciences (25 %), tourism management (12%). The rest areas of specialization are the following: archeology , marketing, history of arts, nature sciences and pharmacy, pedagogy, philology and latvian literature, law. The requirements for the professional specialization of employees directly depend on the profile of the museum and the position held by the person. E.g. education in history is a mandatory requirement for the specialists of the History profile museum. In the case of some museums, specialization in a certain field is emphasized as important, for example, archeology, medical history, etc.

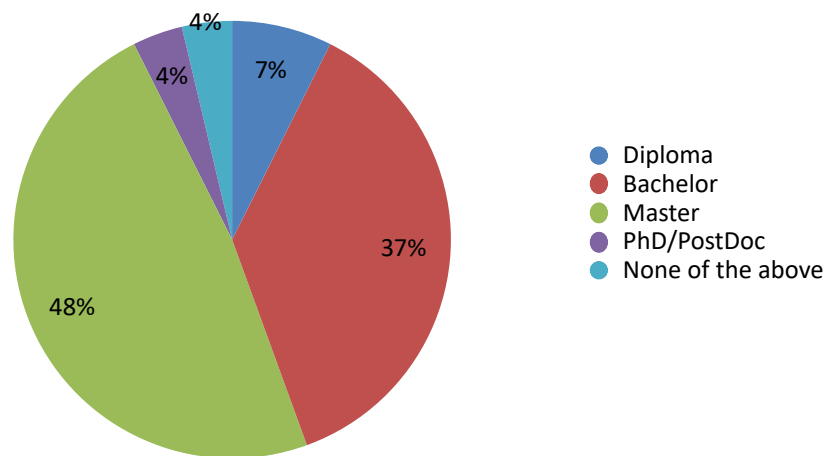


Fig.2- Education level of respondents.

2.2 Experience in digitization of culture heritage/ tourism

2.2.1 Affiliations and positions held

According to the revealed data museum is declared as the workplace in 93% of cases. Only 1 person from respondents is working in associations related with heritage and another one is a university employee. This is also explained by the approach, that museums were also the primary target group contacted by the developers of the questionnaire.

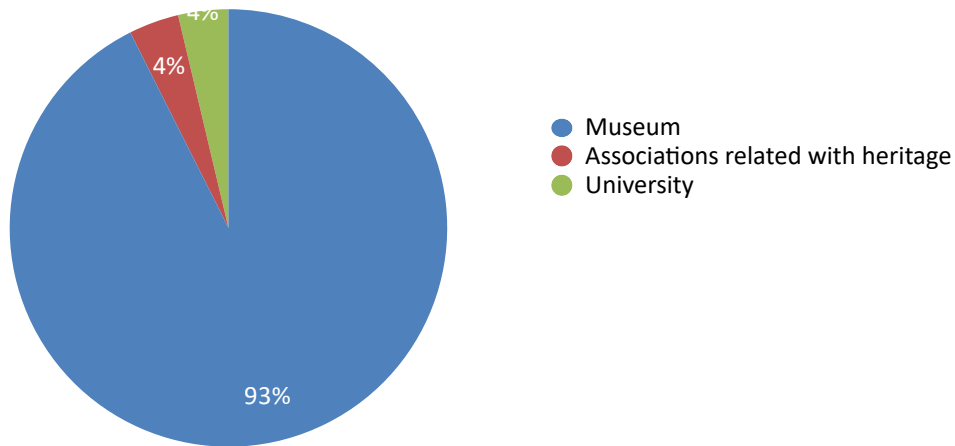


Fig. 3 - Affiliations.

As can be seen from the Figure 4, the majority of respondents are employees and managers (with 48 and 30 % of respondents correspondingly). 19% of the employee's are researchers and one respondent has declared a curator employment position.

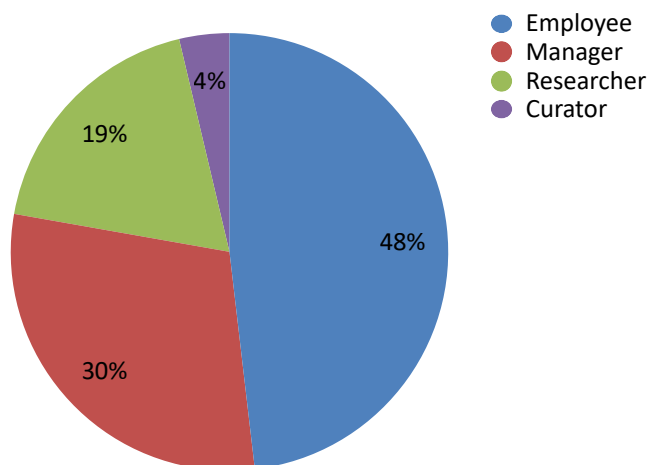


Fig. 4 - Positions held.

2.2.2 Working experience

The working experience inquiry has revealed that the majority of respondents had worked museum/ heritage sector for more than 5 years. While the minor part - for less than 5 (11%) or 2 (7%) years (see Fig. 5).

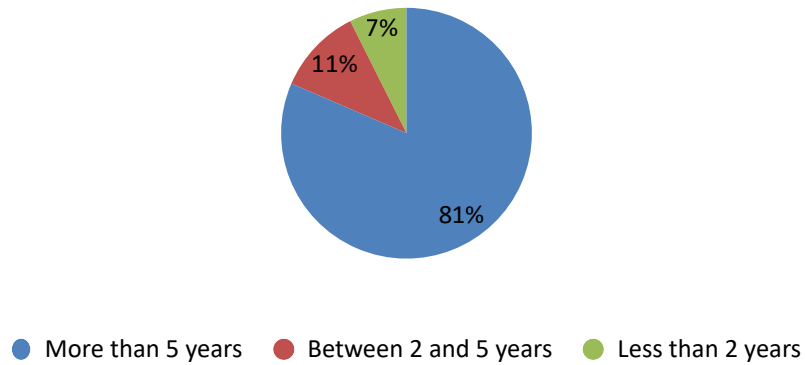


Fig. 5 - Working experience in years.

2.2.3 Previous experience in digitization and the tools used

Regarding this dimension, according to the data gathered, the majority of respondents do possess previous experience in digitization: a half of respondents have dealt with tangible heritage, however 27% admit that their previous work experience is not connected with digitisation in heritage field. 19% of respondents are experienced in work with intangible heritage, while 4% has obtained an experience with digitization but in other institutions not directly related to heritage.

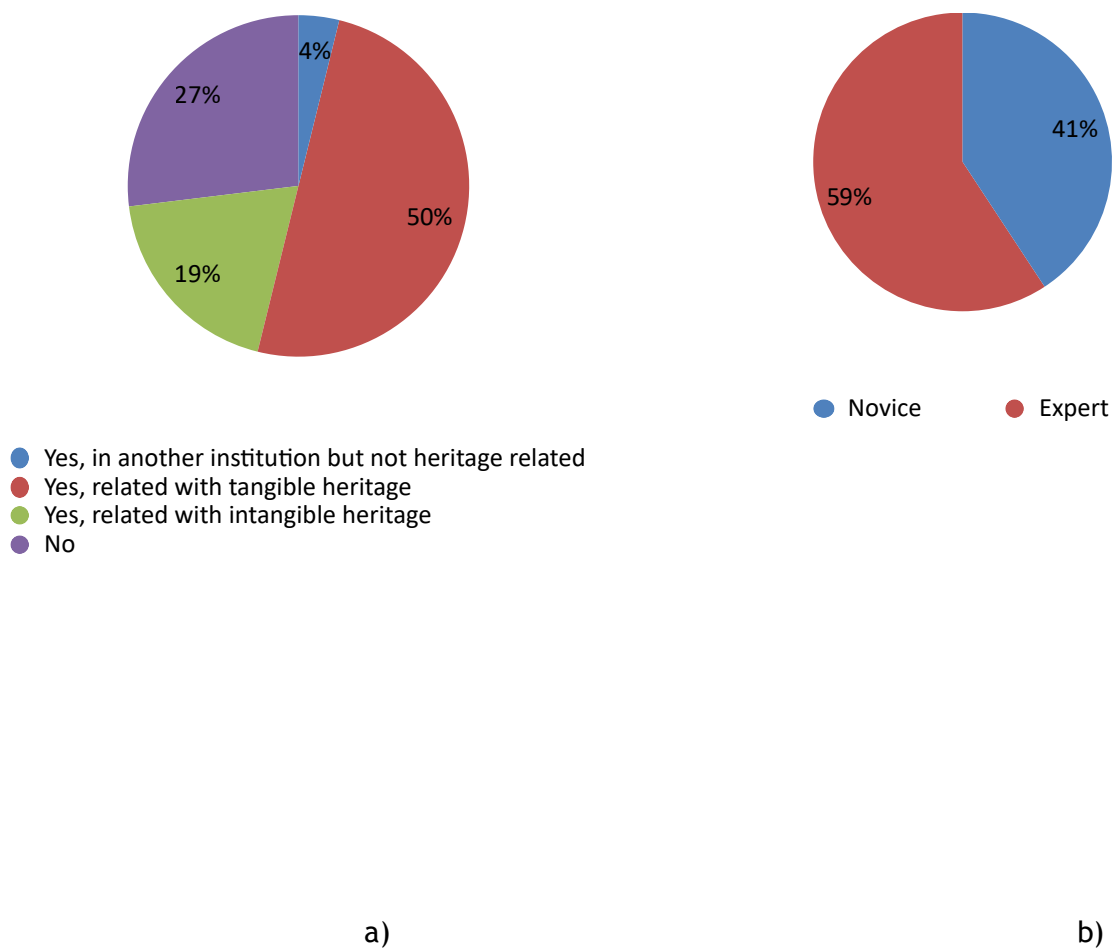


Fig. 6 - Previous experience in digitization (a) and the level of proficiency in technological tools/ solutions (b).

Despite what was noted in the previous paragraph, 39% have no previous experience in digitization, 59% declared themselves as experts in terms of their level of proficiency in technological tools / solutions. As to the kinds of the technological instruments used, majority of respondents have mentioned video/photo editing and RAW, TIFF, JPG format use, as well as scanning, audio recording and editing. 41% consider their digitization skills at a novice level and have commented, that either don't use digitization tools or digital libraries at their institutions are in development phase.

2.2.4. *The formats used for cataloguing and storage*

The the list of the formats and tools named by respondents are:

JPG, PNG, TIFF; audio/video formats - without specification ; text - PDF. In addition, as the instruments used in cataloguing the following ones have been mentioned: digital databases, CDs, External HD, NMKK (catalogue format), scanning, audio recording.

2.2.5 *Cultural heritage legal framework awareness*

The results about legal framework awareness in cultural heritage field shows, that 59% are aware of legal issues.

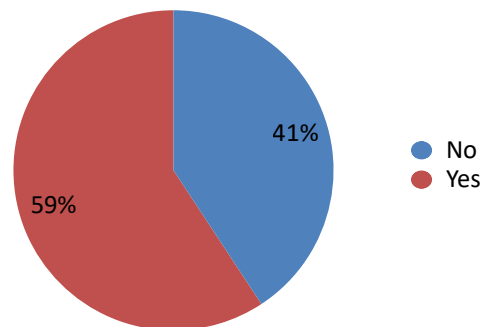


Fig. 7 - Do you know the legal framework for cultural heritage (tangible and intangible) in your country?

2.3 *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, Network building skills, Innovation know-how, Digital skills, Big Data. The data summarized in the figure below (Fig. 8).

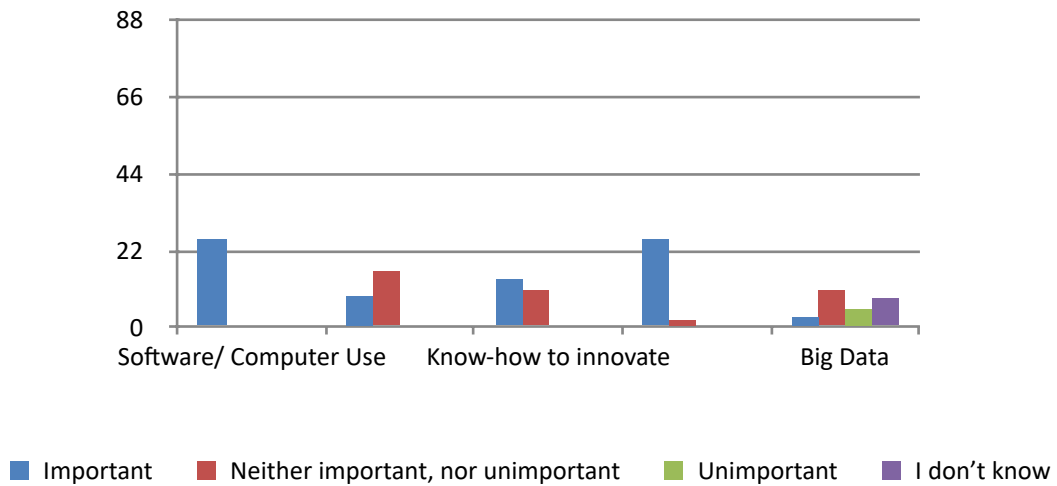
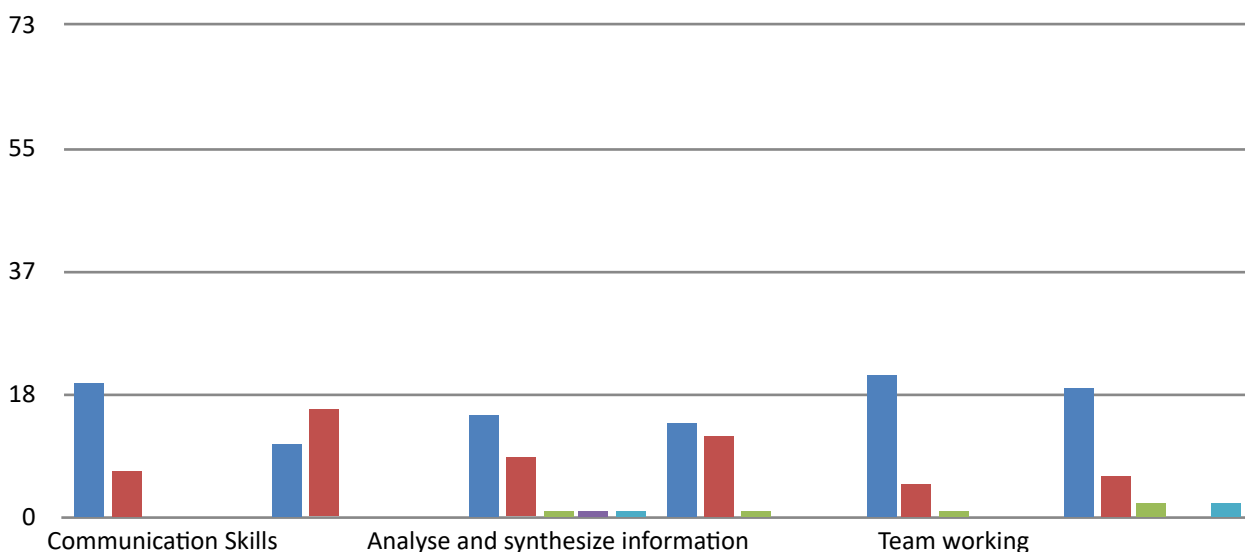


Fig. 8 - How important are the following skills/competencies in your work concerning technology?

The importance of a Software/Computer Use is dominating as a crucial skill. unquestionable for the majority of respondents. In this question some respondents have contacted the researchers in order to get an explanation for the term “ Big Data”,so it is presumable, that significant number or ‘I don’t know ‘answers can be explained by limited understanding about the question.

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 (when compared to the previous one 2.3.) providing the options ranging from “Very Important” to “I don’t know”. The total number of skills to estimate is 12. Below two corresponding diagrams (6 per each) are presented and analysed hereafter.



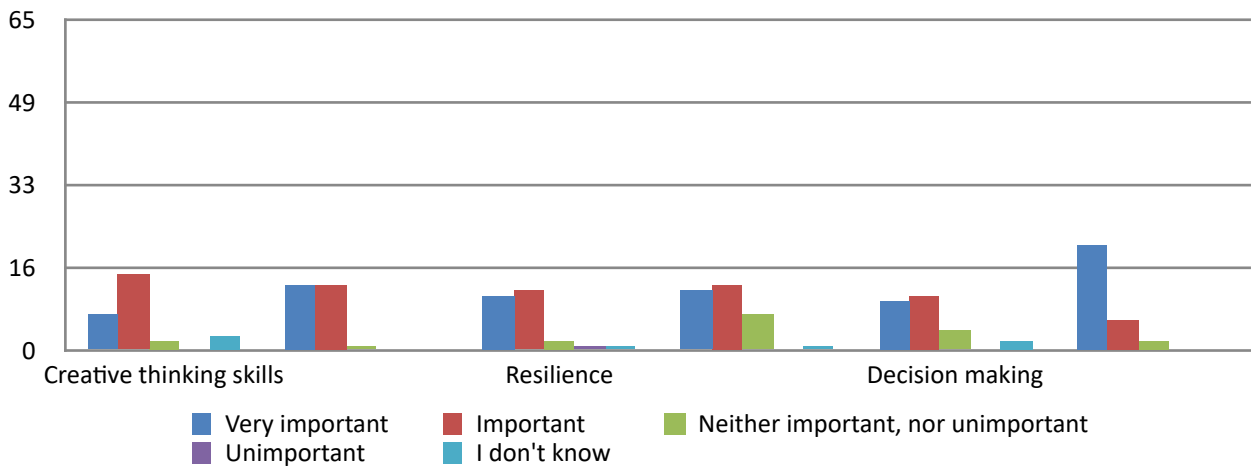


Fig. 9 - Competences a Digital Strategy Manager should have.

As of results presented in Figure 9, among the most appreciable competences of a digital strategy manager the respondents considered the following: communication and team working skills, analytical and networking skills, creative thinking, time management, leadership and change facilitating, skills. for majority of answers the difference ratio between “very important” and “important” options is minor, except of ‘Time management’ skills. which are being considered as very important by the majority of respondents.

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.



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

As diagram displays the most deficient skills revealed are: multimedia production web/app development, digital design, data management/analysis and multimedia production. E-commerce, content management, IP and right management and digital marketing is second priority of the required knowledge. The third classified group includes: technical leadership, product management and content management. Social media and e-communication skills are not mentioned as crucial in the research, which can be based on the profile of the respondents, where no marketing or communication specialists are presented. In b museums, marketing functions are often delegated to communication specialists, in some cases marketing functions are also performed by the museum tour departments and museum guides .

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 scanning competences and photography and video making competences were mentioned as a priority, as well as operating the digitizing machines (e.g. copy stands).

2.3.4. The kind of digitization software used in the country

The question was answered by 14 respondents out of 27. 8 of which aren't aware of any software used for digitization. Other respondents have mentioned Europeana platform, scanning , photography , photo/video editing , MW standard, 3D scanning and photoshop.

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

For this question also only 16 responses have received, where only 9 respondents have indicated formats as : MP3, MP4, MPEG4, H.264 Mov, .mov, AVI, CD , DVD.

2.3.6 Copyright issues

Regarding the copyright issues, majority of answers (15 out of 27 respondents have answered at all) demonstrates limited understanding about intellectual property rights in digitization process and end use of digitized intangible objects. The most relevant and thus worth noting are the following ones:

- IP rights belongs to the museum;
- All IP rights are binding to the museums;
- Existing author right law is mentioned as well as copyright management body AKKA/LAA is mentioned as a contact institution refer to.

However the importance of IP rights issues is mentioned as :

- IP plays a significant role in being able to share knowledge, provide access to collections, and preserve and manage collections.
- its important in museum marketing

Thus we can see, that museums along with digitization process often are in transit to new business models and the identification of IP relating to museums and the recommended best practices to manage it are crucial for the correct development and marketing of digital products.

2.3.7 The tools to improve the work

The results of the corresponding inquiry are presented below (See Fig. 11).

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



As can be seen in Fig.11 above , respondents consider availability of digitisation equipment and training in equal proportions as most important resources (tools +knowledge)for achieving the goal: Production, presentation and updating of digital materials.

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 (65 %) have declared "No", while the resting part, who said "Yes" (35%) has specified the following ones:

- As far as I know, the guidelines project is in development stage
- There are recommendations in Catalogue of National Holding of Museums
- There are Intangible cultural heritage catalogue guidelines

In addition to the mentioned Joint Catalogue of the National Holdings of Museums, it is concretised, that this is the major computerized information system, the database of which builds the core information of museum objects. Creation of Joint Catalogue of the National Holdings of Museums is determined by:Law on Museums and Regulations of National Holding of Museums. But still there is no unified standard in Latvia for museum object documentation, no unified museum object classifier and there are differences in museum object information processing in museums.

2.3.9 Previous experience in cataloguing of intangible assets.

As results show, the majority of respondents (90%) have no previous experience in the intangible assets cataloguing. Whereas those who possesses, have encountered the following kinds of difficulties:

- Shortcomings in the system, technical mistakes
- Non user friendly software
- Lack of approach and system knowledge

29 % of the respondents admitted that their museum have a written strategy for y ICH digital collection? in one one another quality content.

2.4 Previous training in digitization of culture heritage/museum

One half of the respondents revealed, that they have taken part in training in relation to ICH for culture heritage sector in past three years. The course themes were mentioned such as:

- Local further education courses regarding overall digitisation process
- Courses for improvement of museums specialist qualification, where digitisation Issues were touched to some extent;
- The course of preservation of intangible cultural heritage ;
- Training in photography and scanning

Regarding the training in relation to digitalization of culture/heritage museum 22% of the respondents have taken the courses in this field. Among the themes observed have been :

- Cataloging courses of intangible cultural heritage (3 respondents)digitization of the archaeological heritage of a civic museum and of the library heritage of a library.
- Courses organized by Society of Museums
- digitisation of museum holdings
- general digitisation courses

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

As can be seen from Figure 12, the most appreciable option for 87 respondents who have answered the question are talking to experts (65,5%) . Also case studies represent a significant interest for the respondents as well. As for practical tools or products, study visits and sharing expertise with peers the options have gained the interest of 20 - 23% of respondents. Online webinars are attractive for 14,9%. The relevant information through newsletters and analysing evaluation reports, research or studies and hands-on session haven't gained interest on interviewed museum workers. As presumable reason for it might time time-consuming character of these methods.



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

As for the types of learning preferred, the resulting pie diagram is presented below in Figure 13. Note, that the percentage provided is referred to 27 responses.

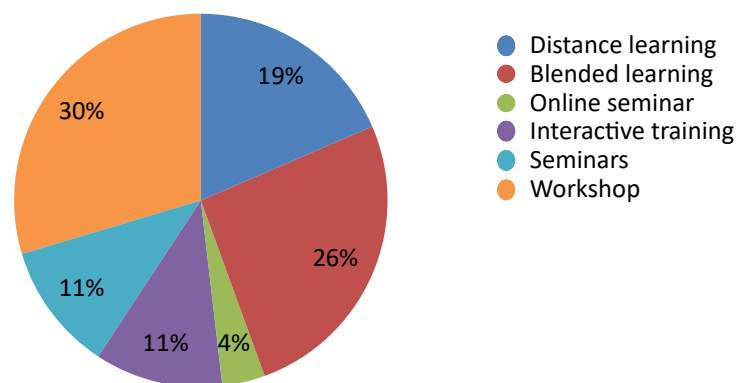


Fig. 13 - Types of the learning preferred.

According to the results achieved the final rating looks as following (in descending order of popularity): workshops; blended learning; distance learning; lectures; interactive training and seminars in equal proportions and online seminars. Respondents haven't mentioned info days and lectures as options for their training.

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.

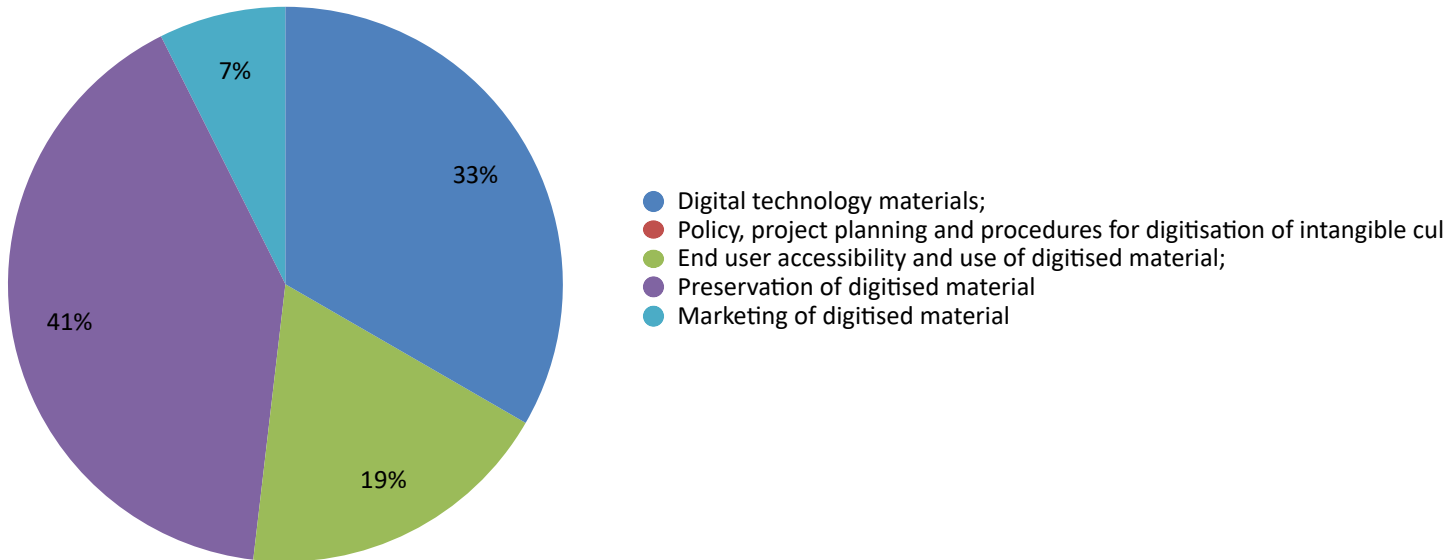


Fig. 14 - What kinds of needs are the most important and should be covered in training program in digitisation of intangible cultural heritage?

The data gained reflect, that most desired skills for questioned museum workers consider preservation of digitised material, however no one has mentioned project planning and procedures for digitisation of intangible cultural heritage to be covered during the training sessions. Digital technology materials is a theme of second importance and end user accessibility with use of digitised material is mentioned as important for 19% of the respondents. in turn, result to be equally quite interesting as well. And finally, marketing issues result to be attractive for 7% of respondents.

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



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

First, worth noting that “Quality of digital material”, as an option, has not been chosen at all, thus is absent in the diagram. Nevertheless, from the results gathered, proper digitization has obtained the maximum of votes (44%). Also ‘understanding of digital opportunities’ have been mentioned by 15% closely followed by “unified digitization style” “opportunities to use digitised material “and “opportunities filling questionnaires to facilitate work and description “ each in 11% of cases. The least interesting option is regarding basic information about digitization, where 7% of respondents have chosen the option.