

MULTIMEDIA SERVICES IN UNIVERSITY LIBRARIES: INTERNATIONAL BEST PRACTICES AND ANALYSIS OF ASEM USERS’ EXPERIENCES

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Abstract: The rapid transformations driven by digitalization and the expansion of the online environment have fundamentally changed the way university libraries design and deliver their services. Over the past two decades, professional organizations such as the International Federation of Library Associations and Institutions (IFLA) and the American Library Association 165 (ALA) have outlined strategic directions for adapting libraries to the demands of the digital era, emphasizing open access, information literacy, and the development of modern multimedia infrastructures. In this context, libraries are no longer merely spaces for storing information but have evolved into digital hubs that facilitate access to electronic resources, online training, and research support. This article examines these international trends in relation to the local context of the Scientific Library of the Academy of Economic Studies of Moldova (ASEM), with a particular focus on the Multimedia Center. The evaluation of its services was conducted through a survey addressed to the academic community, aiming to identify users’ needs and expectations, frequency of multimedia infrastructure usage, satisfaction with access to electronic resources, and interest in digital guides and tutorials. The survey results highlight an increasing preference for online services and remotely accessible digital resources, confirming global trends toward the virtualization of information services. Respondents request a diversification of electronic resources, more advanced multimedia infrastructure, and interactive guidance and training tools, such as video tutorials or digital guides. The findings indicate that the shift from traditional face-to-face service models to hybrid or fully online models is positively perceived and better aligns with the current requirements of academic environments. The article concludes that integrating user feedback with international best practices forms the foundation for the continuous modernization of library services. Embracing digital technologies and strengthening multimedia services enhance library visibility and relevance, reinforcing its role as an active partner in education and research. The Scientific Library of ASEM is thus positioned as an academic support and innovation center, capable of meeting the challenges of the digital era and fostering an academic culture grounded in open access, flexibility, and inclusivity.

Keywords: university libraries international trends, multimedia services, information users, needs assessment, library modernization.

JEL Classification: I23, I28, L86

1 Introduction

Today, the education system is undergoing profound changes at a global level. The integration of the information technologies into education has become a major priority, offering modern solutions through the emergence of new concepts, the improvement of traditional methods, and the expansion of multimedia communication. Libraries, an essential part of the educational process, have quickly realized the strategic role of this information and communication

environment. Through the work of librarians and IT specialists – who identify, select, organize, and evaluate online resources – virtual libraries are being built: valuable collections that facilitate user access to information, programs, and digital communities.

Students need services that support their intellectual, emotional, linguistic, social, and educational development, and university libraries can play an important role by providing contexts for learning, socializing, and engaging with science and culture.

European and national policies increasingly favor digitization and multimedia services, forcing decision-makers and library managers to analyze how they can offer full or partial electronic services. The central challenge for libraries is to integrate new digital formats into traditional service structures, along with staff training and the adoption of modern resource management models.

2 Literature review

Issues related to the modernization of library services and the study of user needs are extensively discussed in the specialized literature of the last decade. The National Bibliometric Tool records over 20 publications that appeared between 2015 and 2025, analyzing the trends, challenges, and innovations that mark the evolution of university libraries. An important segment of these contributions are studies dedicated to the modernisation of library services, carried out by authors such as A. Repanovici, N. Cheradi, B. G. Adăscăliței Macari and R. Sobieski-Camerzan. These works examine the transformations generated by digital technologies, the implementation of innovative services, and the development of strategies aimed at optimizing the functioning of libraries (Repanovici, 2025; Cheradi, 2023; Adăscăliței Macari, 2024; Sobieski-Camerzan, 2020; Malaniuc and Sandu, 2024).

Another significant area of research focuses on analyzing user needs, assessing satisfaction, and adapting services to the actual requirements of the public. Authors N. Cheradi, S. Ghinculov, E. Railean, A. Drăgănel, and I. Nicuță have developed relevant studies in this regard, contributing to the understanding of users' information behavior and expectations (Cheradi and Nicuță, 2021; Ghinculov et al., 2015; Drăgănel, 2025; Nicuță and Cheradi, 2022).

Within the ASEM Scientific Library, studying information needs is an ongoing activity, with several studies conducted between 2015 and 2025. Among these, two studies dedicated to information services for doctoral students (2015; 2021) stand out, as well as the research “Assessment of the information needs of users in the ASEM Scientific Library” (2021), which provided valuable insights for the development and adjustment of the institution's services.

3 Assessment of user needs and expectations

The Scientific Library of the Academy of Economic Studies of Moldova (ASEM) has responded to these challenges by developing the Multimedia Center, which is an information structure equipped with modern equipment. This center explicitly responds to the trend of making high-quality goods and services of general interest available to all, and the Republic of Moldova's Digital Transformation Strategy for 2023-2030 (Digital Transformation Strategy..., 2023) promotes access to such services. The information technology-based services and activities provided by university libraries help students develop a positive attitude towards education, in line with the goal of building an e-Europe, and contribute to their development as human beings capable of playing an active role in society.

The Multimedia Center aims to support various categories of users: students, master's students, teachers, and researchers by offering services that facilitate access to knowledge and provide access to information resources relevant to the study process and research activities. In recent years, the Multimedia Center has undergone an extensive reconfiguration process, along with the transfer to a new space. The service team has rethought the way it organises and carries out its activities, adapting to the new conditions in order to ensure the continuity and quality of the services offered to users.

In this context, there was a need to conduct research on identifying users' needs, expectations, preferences, and satisfaction in order to tailor services, resources, and activities to the real needs of the academic community. Such research allows for a more efficient use of resources, increases user satisfaction, and strengthens the library's role as a center for learning and innovation. Understanding information needs facilitates the development of personalized services and contributes to the formation of a lasting relationship between the library and its community (Țurcan, 2021).

Based on this, between March 1 and 31, 2025, research was conducted to assess the needs and expectations of users regarding the services of the ASEM Scientific Library's Multimedia Center. The purpose of this study was to analyze how users of the Multimedia Center perceive the services offered, the degree of use, the level of satisfaction, expectations, difficulties encountered, and suggestions for improvement. The results of this analysis provide valuable information for adapting services to user requirements and for the strategic planning of the Center's infrastructure and services, contributing to their increased efficiency and relevance.

Research objectives:

1. Determining the profile of Multimedia Center users (user category, frequency of visits, etc.).
2. Identifying the main purposes of using the Multimedia Center.
3. Assessing user satisfaction (technical infrastructure, service quality, resource accessibility, etc.).
4. Analyzing the difficulties encountered by users.
5. Formulating recommendations for improving and diversifying the services offered.

4 Methodology

The research tool used was an online GoogleDocs questionnaire survey. The research sample consisted of 56 respondents, representing the main categories of users of the Multimedia Center: undergraduate students, master's students, teaching staff, and doctoral students. This diverse distribution allows for the evaluation of services according to the specific needs of each category, highlighting the differences and similarities in how the Center is used.

The sample represents approximately 10% of the most active users of the Multimedia Center, can be considered representative, and allows for the collection of relevant data, while ensuring the reliability and validity of the interpretations resulting from the questionnaire.

5 Results and interpretations

Respondent profile. Of the 56 respondents, the vast majority are students – 36, master's students – 9, teachers – 9, doctoral students – 2. This diversity highlights the role of the Multimedia Center as a space open to all categories of users, its ability to respond to a variety of needs, and emphasizes the importance of adapting services to each user segment.

Frequency of use. The analysis of frequency of use revealed three main categories: users who visit the center several times a week (24); once a week (11); once a month (8). Six respondents use the center daily, most of whom are students, suggesting that the Multimedia Center's services are integrated into their academic routine. The segment of occasional users (less than once a month – 7 respondents) indicates the existence of untapped potential for promoting services and attracting them to more frequent use.

Purposes of use. Respondents indicated that the main reasons for using the Multimedia Center include individual study (45), access to electronic resources and scientific databases (34), copying, printing, and scanning services (32), as well as documentation activities for research. This demonstrates that the center is not only a physical space, but also an essential support infrastructure for the educational and scientific process, integrating digital resources with traditional study activities.

Evaluation of services. The evaluation of service quality showed high average scores: the quality of equipment and resources obtained an average score of 4.66, with a maximum of 5 points (Figure 1), while the atmosphere and comfort of the space achieved a score close to the maximum – 4.95.

Most participants (40) stated that the Multimedia Center is “Very useful” for academic activities. This is confirmed by the fact that there were no responses of “Not at all useful” or “Neutral”. These results indicate that overall user satisfaction is high and that the physical environment contributes significantly to their positive experience.

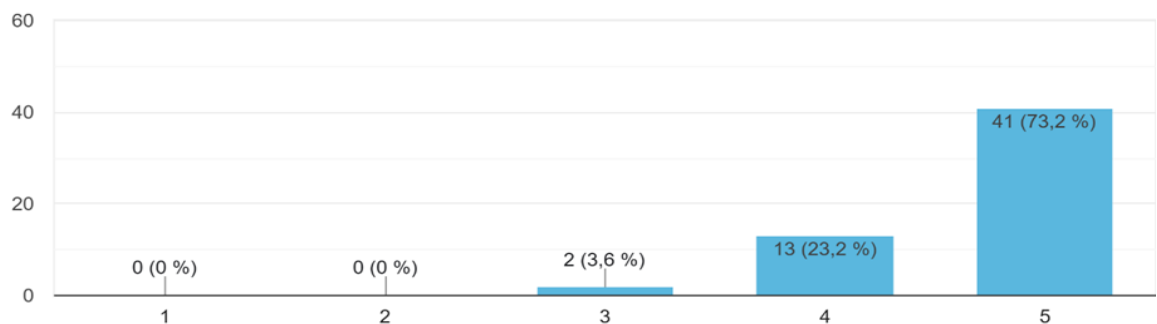


Figure 1. Degree of user satisfaction with the quality of equipment and resources

Source: own work

Use of electronic resources. The study revealed the most popular resources: in first place was the library's electronic catalog, with 45 respondents having used it. In second and third place in terms of popularity were the IREK Institutional Repository (26 respondents) and EBSCO databases (21 respondents), while the National Bibliometric Tool is used by 15 respondents. Web of Science is used by 13 respondents, Scopus by 9, and DOAJ is used by only 2 respondents. One respondent also mentioned that they did not use any databases.

Difficulties encountered. Most respondents (52) mentioned that they did not encounter any difficulties in using CM. However, in response to the question “*What are the main difficulties you encounter in using the library's electronic resources?*” (Figure 2), users specified the following: lack of skills in using databases (17), difficulties in identifying relevant sources (11), linguistic difficulties in accessing international electronic resources (8). These issues highlight the need to implement training programs, practical guides, and personalized support to improve users' information and digital skills.

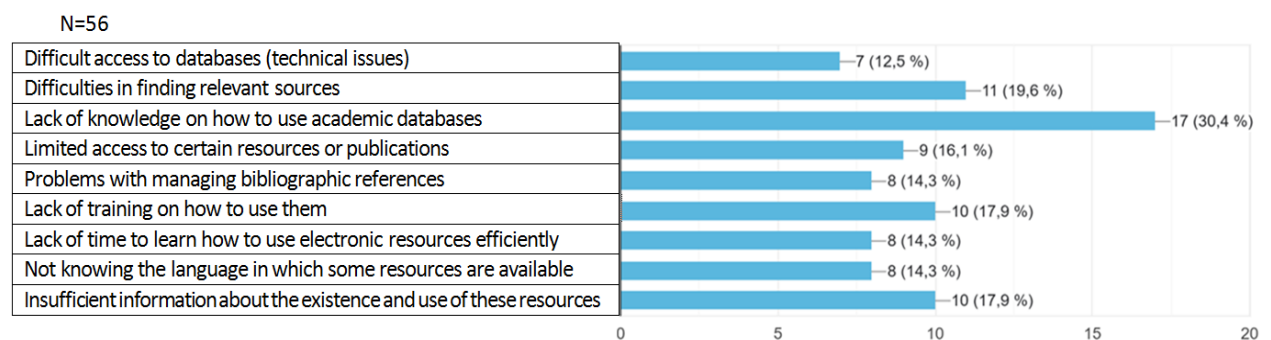


Figure 2. Difficulties encountered in using the library's electronic resources

Source: own work

Expectations and suggestions for development. Respondents proposed several measures to improve services, providing answers to the semi-closed question “*What additional resources or services do you think the Multimedia Center should offer to facilitate access to information?*”. Thus, 42 respondents suggested equipping the center with modern equipment; organizing training sessions and webinars on the use of databases (25), and 19 respondents considered it useful to equip the Center with headphones and other multimedia accessories for individual activities. Nine respondents requested the creation of online guides and tutorials; although this option was mentioned less frequently, it indicates interest in independent training and learning tools (Figure 3).

The results obtained outline a predominant need to modernize the technical infrastructure and develop digital skills through training activities. Multimedia Center users express a priority interest in improving equipment and diversifying training methods, confirming the current trend toward digitizing the educational process and creating an interactive and effective learning environment.

N=56

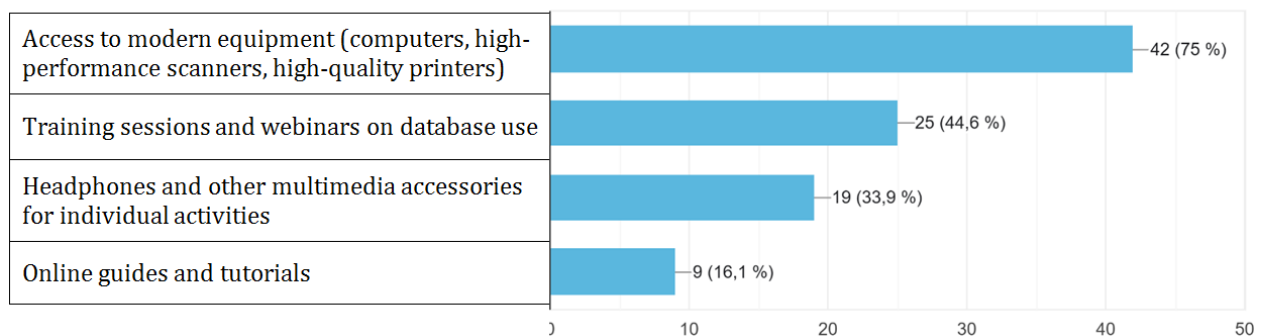


Figure 3. Users’ suggestions regarding additional resources or services that the Multimedia Center should provide

Source: own work

Analysis of suggestions for improving the Multimedia Center's services, provided in the open question, revealed the following:

- most of the responses collected focused on the need to modernize equipment and upgrade to high-performance technology;
- proposals were made to organize training sessions and webinars on how to use databases;
- some respondents said they were satisfied with the existing services, and some suggested more active interaction with students.

In conclusion, the main areas for development identified are updating the infrastructure and expanding training and communication activities, and the responses to this question support the findings highlighted in other questions.

6 Conclusions

The results of the questionnaire confirm the importance of the Multimedia Center as a multipurpose space, essential for the learning and research process. Users appreciate the comfort and usefulness of the services, but highlight the need to modernize the infrastructure and provide training in the use of electronic resources. These findings are in line with global trends in the development of university libraries as hubs for digital learning and integrated research.

The Multimedia Center of the ASEM Scientific Library is viewed positively by all categories of users and plays a strategic role in supporting academic and research activities. However, in

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order to maintain the relevance and efficiency of services, technological modernization, the development of training programs, and the active promotion of electronic resources are required.

Recommendations

1. Modernization of technical infrastructure: replacement of computers and multimedia equipment, software updates.

2. Organization of user training activities: workshops, webinars, and video guides for information and digital literacy.

3. Active promotion of electronic resources: information campaigns on international databases and the IREK – ASEM Institutional Repository.

4. Development of educational resources: online guides, video tutorials, and multilingual materials.

5. Adaptation of space and extension of operating hours: areas dedicated to individual and collaborative work.

6. Regular monitoring and evaluation: annual questionnaires to adjust services to user needs.

As digital content becomes increasingly important, the balance between printed materials, multimedia resources, and online access is constantly changing. This transition also influences the way library spaces are organized, as users demand more and more powerful computers and equipment dedicated to accessing digital resources.

In this context, librarians are consolidating their role as specialists in selecting, organising and mediating access to multimedia resources. A major responsibility is to structure the abundant information available online and develop high-quality library services that are accessible both locally and remotely.

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