Music librarianship and creativity

The case of International Association of Music Libraries, Archives and Documentation Centres (IAML)

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Abstract

Purpose – International Association of Music Libraries, Archives and Documentation Centres (IAML) aims to promote activities and cooperation between music libraries worldwide. IAML configures policies affecting to set up their working framework as well as music information services at national and international level. Furthermore, IAML’s function promotes the role of music libraries linking the cultural life of every place, fostering musical creativity. Therefore, the purpose of this paper is to present the crucial role of IAML’s function in enhancing musical creativity.

Design/methodology/approach – The paper provides theoretical and practical issues on topics related to music information employed for musical creativity in the context of music librarianship. It presents the function of music information management organizations and especially that of IAML as a mechanism for enhancing musical creativity, and at the same time it discusses suggestions and practices for the interrelation between them. More specifically, it discusses perspectives about educational programs on information literacy for musical creativity, the enhancement of the digital presence of all musical trends (the long tail to the demand of music information services), the strengthening of the culture of openness to a wider scale and the use of music information management software, as well as the linkage and stimulation of synergies between music information management organizations for the benefit of various music communities.

Findings – The outcomes of the study set up a theoretical connection between music librarianship issues and musical creativity, in terms of identifying that musical creativity is directly linked to music information and to the operation of the music libraries, and it can also be influenced by the availability of music information services and the information profile of the musicians involved.

Originality/value – The significance and originality of the study should be emphasized since it is the first study providing theoretical and practical issues linking music librarianship with musical creativity.

Keywords Music information, Information seeking, Information management organizations, International Association of Music Libraries, Archives and Documentation Centres (IAML), Music librarianship, Musical creativity

Paper type Conceptual paper

Introduction

Library associations play a vital role in librarianship profession enhancement aiming at improving the information service provision, and strengthening at the same time the role of the libraries internationally (Henczel, 2014). The mission of library associations is based on the development and the improvement of products and services providing practical solutions to the problems of the rapidly changing information environment of our time, as well as of excellence and innovation promotion (Ghosh, 2006). Moreover, the aim of library associations is the development, expansion and strengthening of the professional knowledge by promoting the interests of librarians, as well as exchanging and disseminating views and information between them (Thomas et al., 2010; Ahmadian Yazdi and Deshpande, 2013). Library associations are comprised of groups of either general or specialized libraries which are identified by subject, geographical distribution or both (Rosa and Storey, 2016). More specifically, about music librarianship profession, crucial role plays the International Association of Music Libraries, Archives and Documentation Centres (IAML) which aims to promote activities and cooperation between music libraries (Wagstaff, 2000). IAML defines...
policies affecting music libraries’ working framework establishment and music information service provision at both the national and international level. Also, IAML’s function is to promote the role of music libraries, linking the cultural life of every place and fostering musical creativity for the general interest.

Regarding the concept of creativity, this refers to the production or invention of new ideas about resolving or rewriting problems with a specific expected outcome (Newell and Shaw, 1972; Hennessey and Amabile, 1988). According to Perkins (1981) and Weisberg (1986), creativity is the process of applying existing knowledge, logical reasoning, memory retrieval and visual imaging. Creativity as a concept must add value, whether it is the production of new ideas or the recasting of existing ones; as a new idea is considered creative only in the case that it adds value or implies a positive assessment (Higgins, 1999). Furthermore, imagination, which involves the production of new ideas that were not before available and the production of different modes of perception of events, deemed important to meet creativity (Ogilvie, 1998). According to the above, creativity refers to the ability of producing high-quality ideas that are both original and useful for everyday problems and situations (Kaufman and Sternberg, 2007). It is a broader concept which is linked to the everyday life and varies from person to person, enabling unlimited interpretations of creative thinking and personal expression (Kaufman and Sternberg, 2006).

Musical creativity refers to various areas of musical creation (e.g. composition, improvisation, interpretation), listening (e.g. for professional or amateur purposes, recreation), as well as analysis approaches (e.g. systematic, intuitive, automatic) (Hickey, 2002). According to Hickey and Webster (2001), the creative process in music is described as the thought that takes place when a person plans to produce a creative product which could be a result of intent or design; since originality without intention or design does not necessarily imply a result as a creative product. Webster (1990, 2002) refers to the study of creative thinking, focusing on the creative process and the role it plays in music. According to this approach, creative thinking in music is perceived as a dynamic mental process which alternates between divergent and convergent thinking, follows specific stages through time, triggered by factors such as internal musical skills and external conditions, resulting in a musical product which is new to the creator (Webster, 2002). Furthermore, elements relating to musical creativity can be found in Gardner’s (1983) theory of multiple intelligences and specifically, musical intelligence. Gardner (1983) has identified that the mind comprises of seven types of intelligence, each operating in a specific cultural domain: verbal-linguistic, logical-mathematical, spatial, bodily kinesthetic, musical, interpersonal and intrapersonal. Each intelligence has its own core set of operations, supports specific activities and highlights the capacity to solve problems or to create products that are valued in one or more cultural settings in terms of their different content (Gardner and Hatch, 1989). According to Gardner (1983), musical intelligence involves skills in performance, composition and appreciation of musical patterns (e.g. awareness, appreciation and use of sound, recognition of tonal and rhythmic patterns, understanding the relationship between sound and feeling), containing elements of musical creativity. It encompasses the abilities to recognize and produce musical pitches, tones and rhythms with the appreciation of the forms of musical expressiveness, allowing people to create, communicate and understand musical meanings.

Creative practices in music imply the exploitation of its multiple features, critical thinking and continuous exposure to ideas and experiences that lead to personal discovery as well as the creation of new musical knowledge (Webster, 2002). The analysis of these complex creative processes in music provides a useful framework for understanding the information behavior of people associated with it. There are several theoretical and empirical approaches to the role of information seeking in the literature, in terms of reducing uncertainty and meeting the information needs of musicians (Orio, 2006; Kostagiolas, Lavranos, Korfiatis, Papadatos and Papavlasopoulos, 2015), as well as how this affects the
way people perceive the essence of music and the way they manage collections of musical material to maintenance, access, research and other uses (Cunningham et al., 2003; Cunningham and Nichols, 2009; Weigl and Guastavino, 2011). Musicians, upon seeking various information, with the aim to strengthen their creative practices in their everyday life, may lead themselves to musical composition, performance, improvisation, listening and analysis (Lavranos, Kostagiolas, Korfiatis and Papadatos, 2016). Music information seeking regarding the above practices is possible to influence the creativity of the involved musicians in the creative process and its effects, by creating musical products (Lavranos et al., 2015). Musical creativity is directly linked to music information seeking and to the operation of music libraries, and at the same time it can be influenced by the availability of music information services and the information profile of the musicians involved (Kostagiolas, Lavranos, Martzoukou and Papadatos, 2015).

According to the above, the aim of the paper is to give the crucial role of IAML in enhancing musical creativity. Moreover, it presents suggestions and practices about educational programs on information literacy for musical creativity, the enhancement of digital presence of all musical trends (the long tail to the demand of music information services), the strengthening of culture of openness to a wider scale and the use of music information management software, as well as the linkage and stimulation of synergies between music information management organizations for the benefit of various music communities.

Music information management organizations
Music information refers to music data (e.g. literature, notation, multimedia files, etc.) (Downie and Cunningham, 2002) and is represented in various formats and forms of organization (e.g. scores, musicological collections, recordings, etc.) (Lee and Downie, 2004). The nature and content of musical material are described by the representations of music information, reflecting a broad framework of pre-existing and new musical knowledge (Kostagiolas, Lavranos, Korfiatis, Papadatos and Papavlasopoulos, 2015). According to Liem et al. (2011), music information is depicted in various forms directly related to activities such as musical composition, performance and listening. In particular, music information is imprinted with notes (e.g. scores, etc.) and texts related to music (e.g. music books, encyclopedias, etc.), recorded audio in digital (e.g. digital disks, electronic media files, etc.) and analogue format (e.g. vinyl records, tapes, etc.), and taken as a natural sound (e.g. interpretation of musical instruments, sounds of the natural and social environment, etc.). Also, according to the same approach, a musical composer marks his thoughts and knowledge in a musical structure, a performer delivers musical texts and a listener receives music as the natural result of the particular process. Therefore, it is understood that the dimensions of music information may vary in musical composition, performance and listening, as information such as the harmonic structure, rhythm and melodic sequence of a musical work or information emerge through the reading of the score. At the same time, information such as timbre, articulation, the timing of a musical performer are both individually and as a whole, part of the interest of each listener (Orio, 2006).

In the current information environment, access to music information is provided through management bodies such as music libraries and archives, foundations and supervised organizations, professional and research institutions, museums (Kostagiolas, Lavranos, Martzoukou and Papadatos, 2015). The transfer of music information between people involved in music either professionally or in an amateur manner, as well as its management organizations is carried out in many ways and methods of distribution (Laplante and Downie, 2006). The aim of music information management organizations is to manage musical material (e.g. notation, audio, digital, analogue, etc.) to meet individuals’ needs (Liem et al., 2011), as well as to guarantee the smooth flow of music information through
communication channels and paths between information resources and those involved in
music (Taheri-Panah and MacFarlane, 2004; Laplante, 2010). In particular, music libraries' purpose is gathering, processing, preservation, promotion and provision of various forms of music information (Bryant, 1985). Music libraries include autonomous libraries (acting as independent music information management organizations), libraries that have been designed to support music organizations (e.g. orchestras, universities, etc.), and music archives (they are part of a library that has other collections of different objects) (Bradley and Coover, 2000). Furthermore, music libraries in terms of their typology divide into conventional, digital and hybrid type libraries (Kostagiolas, Lavranos, Martzoukou and Papadatos, 2015). This distinction arises from the nature of modern music information (e.g. conventional, digital, audiovisual material, etc.) and the use of modern technological capabilities for comprehensive music information management.

In recent years, the growth of hybrid libraries has increased, according to technology and internet evolutions which have given new capabilities across a broad array of aspects related to design, development, implementation and evaluation of both conventional and digital information services (Pinfield et al., 1998). A hybrid type of libraries involves five key components which join their underlying framework, including people, information resources, technological advances, as well as the physical and digital space of a library (Bilandzic and Johnson, 2013). Hybrid libraries consist of both conventional and digital information services, representing the enhancement of information creation, research, use and storage and their functional capabilities are organized to support the information needs of several user communities in a physical and digital space (Pinfield et al., 1998). In that context, hybrid libraries join the extension of a variety of information institutions where resources are selected, organized, preserved and accessed in support of a user community combining the opportunities of spatial and digital means to ease social interaction (Bilandzic and Johnson, 2013). In the case of music libraries, the advances and diversity of new technologies as well as the digital representation of musical material have led to the growth and provision of a hybrid type information services, which give to the users new perspectives and capabilities of acquiring music information (Bainbridge et al., 1999). Hybrid music libraries' function provides music information services in a physical and digital space aiming at the successful interaction and user's satisfaction (Blandford and Stelmaszewska, 2002). Furthermore, hybrid music libraries have the advantage of designing special interfaces to meet their goals, allowing easy access to musical material which is delivered over a network in multiple formats. According to Kostagiolas, Lavranos, Korfiatis, Papadatos and Papavlasopoulos (2015), hybrid type music libraries tend to be preferred over the others, as music information management organizations by people involved in music information seeking. They provide access and use in both conventional (e.g. books, encyclopedias, journals, articles, scores, etc.) and digital (e.g. any material in audio and visual impressions, digitized scores and books, etc.) type of music information according to the technological evolution (Luttmann, 2004). The function of music libraries through the development and configuration of information services leads music information management to new levels and with proper programming may be the trigger for a modern research activity in this discipline.

International Association of Music Libraries, Archives and Documentation Centres (IAML)
The increase in the number of music libraries that took place internationally in the early twentieth century, as well as the need to set up an institutional framework for music information management resulted in the creation of music library unions (Kostagiolas, Lavranos, Martzoukou and Papadatos, 2015). Initially, Music Library Association was founded in 1931 (MLA, 2017). Its function was restricted in the USA with the aim of creating,
developing and using music libraries, encouraging musical literature collection, effectiveness of music information services and promoting the profession of music librarians (Oates, 2004). The need for development of an association that will not be restricted within the geographical boundaries of a country, as well as to set up an international framework for the operation of music libraries led to the founding of the International Association of Music Libraries in 1951 (Wagstaff, 2000). IAML’s function was to encourage cooperation between music libraries and promotion of music librarianship at the national and international level (Kostagiolas, Lavranos, Martzoukou and Papadatos, 2015). In 1980, IAML’s name changed to International Association of Music Libraries, Archives and Documentation Centers, while the acronym remained the same (IAML, 2017). Over the years, two other international associations related to music information have been established such as the International Association of Sound Archives (IASA) in 1969 (IASA, 2017) and International Association of Music Information Centres (IAMIC) in 1986 (IAMIC, 2017).

IAML has about 2,000 independent and institutional members in about 50 countries worldwide. It also has national branches in 26 countries (Australia, Austria, Brazil, France, Germany, Denmark, Czech Republic, Greece, Switzerland, Estonia, USA, UK and Ireland, Japan, Spain, Italy, Canada, Croatia, New Zealand, Norway, South Korea, the Netherlands, Hungary, Poland, Slovakia, Sweden and Finland). IAML’s membership composition consists of major music collections, music and audiovisual librarians, music archivists and documentation specialists, musicologists, music publishers and dealers. Participation is open to any person or body who is interested in the work of the association, and the official languages are English, French and German. IAML is managed by the General Assembly, which consists of all members and meets during the annual conference of the association. The Board convenes with the executive committee of the General Assembly, and consists of elected and appointed members such as the president, the immediate past-president (in the two years after the choice of a new president), the president-elect (in the third year of the president’s term), the secretary general, the treasurer and four vice-presidents. According to the statutes of IAML (2017), its main goals are the following:

- coordination and stimulation of the activities of music libraries;
- support of works of music, literature and of librarianship adjustments in the field of music;
- encouragement of the exchange of musical material and the interlibrary transfer of musical documents between music libraries;
- promotion of the recording of music collections;
- preservation and protection of musical heritage;
- development of collaborations at international level;
- documentation of musical material;
- promotion of cultural importance of music libraries; and
- organization of international meetings between music libraries.

The function of IAML is accomplished through a network of five Institutional Sections (Archives and Music Documentation Centres, Broadcasting and Orchestra Libraries, Libraries in Music Teaching Institutions, Public Libraries, Research Libraries) to consult common concerns and exchange views and information among their members, four Subject Sections (Audiovisual materials, Bibliography, Cataloguing and Metadata, Service and Training) dealing with the activities of libraries internationally, organize sessions on selected aspects of their subject and start new projects, six Committees (Advocacy,
Constitution, Copyright, Membership, Outreach, Publications) related to the provision of advice on administrative and legal matters, one Study Group (Access to Performance Ephemera), and five Project Groups (Access to Music Archives, Core Bibliographic Record for Music and Sound Recordings, Hofmeister, ISBD and Music, Libraries in Music Teaching Institutions and Accreditation) engaged in performing specific tasks within the association. Additionally, IAML is a member of several international organizations in the field of music, librarianship and archives such as the International Federation of Library Associations and Institutions, International Council on Archives, International Music Council and European Bureau of Library, Information and Documentation Associations. IAML is also affiliated with international unions such as the Association Européenne des Conservatoires, Académies de Musique et Musikhochschulen, International Committee of Museums and Collections of Instruments and Music, IAMIC, IASA, International Council for Traditional Music, International Musicological Society (IMS), International Society for Music Information Retrieval and International Standard Music Number (IAML, 2017).

Regarding the publishing activity of IAML, since 1954 the scientific journal “Fontes Artis Musicae” is published on a quarterly basis. This specific journal includes articles related to the aims of the association and is particularly relevant to the fields of international music librarianship and documentation, bibliography, audiovisual materials and musicology. Furthermore, IAML participates co-sponsoring with other international associations such as IMS in order to develop four major bibliographical series for music scholars and librarians, and the “four R-projects” (Répertoire International des Sources Musicales, Répertoire International de Littérature Musicale, Répertoire International d’Iconographie Musicale, Répertoire International de la Presse Musicale) (IAML, 2017).

Music information as a mechanism for enhancing musical creativity
Music information by its nature is a matter of concern for the wider society acting as a stepping stone on expression and creativity (Kostagiolas et al., 2017). Nowadays, the information and internet technology evolution provides access to a range of music information, printed or digital, available both in the national and international resources (Raimond and Sandler, 2008; Kostagiolas, Lavranos, Korfiatis, Papadatos and Papavlasopoulos, 2015). Music information seeking and use take place for a variety of purposes, predetermined or not, with the object of collecting, retrieving, organizing and using it, as part of a systematic or non-systematic activity as well as an active or passive process (Orio, 2006). Therefore, music information seeking and use is possible to help improve the current state of knowledge of the musicians involved (Lavranos, Kostagiolas and Martzoukou, 2016). Several studies in the literature present the hedonic outcomes of music information seeking in individuals’ everyday life (Laplante and Downie, 2011). At the same time, music information seeking and use may have a utilitarian role, providing the necessary supplies to improve the skills and musical perception and practice of those involved in music (Kostagiolas, Lavranos, Korfiatis, Papadatos and Papavlasopoulos, 2015). Indeed, the use of music information on the daily life of individuals may have either an entertainment role or be directed to utilitarian purposes. For example, the use of music information may be carried for pleasure or even for socializing (e.g. recreation, participation in music groups, etc.), while at the same time it can be carried out in the working environment by professionals in the field (e.g. musicians, performers, researchers, educators, etc.).

Music information seeking and use take place in the context of various creative activities such as composition, performance, improvisation, listening, analysis, which constitute multi-dimensional processes leading to a final musical product (Webster, 2002; Lock, 2011). Music information use within the creative activities of individuals involves the exploitation of its multiple features as well as critical thinking, leading most of the time to new musical
knowledge creation (Menard, 2013; Kostagiolas et al., 2017). Therefore, this multidimensional creative process research may lead to a useful framework for understanding the use and impact of music information on musical creativity. This research framework includes the work of Lavranos et al. (2015), Lavranos, Kostagiolas and Martzoukou (2016), Lavranos, Kostagiolas, Korfiatis and Papadatos (2016) which explores theoretical and empirical issues about the impact of music information on musical creativity. More specifically, Lavranos et al. (2015) have developed an integrated theoretical framework for the interaction of music information seeking and use with musical creativity. This approach has been achieved by combining two already widely accepted conceptual frameworks, Wilson’s (1999) for information seeking behavior and Webster’s (2002) for creative thinking in music. According to Lavranos et al. (2015) and Lavranos, Kostagiolas and Martzoukou (2016), there are several personal, interpersonal, organizational, social, physical and environmental factors that affect music information seeking and use in the context of various creative activities in music. Additionally, these factors can interact with different levels and stages of musical creativity which is perceived as an activity that solves information problems arising during the creative process. This fact implies the continuous exposure of individuals to information and critical thinking. Consequently, musical creativity at its core involves the resolution of requested information which satisfies musicians’ information needs. The theoretical framework of Lavranos et al. (2015) considered as a comprehensive model for understanding the issues raised by music information seeking and use in the context of creative activities in music, such as composition, performance, improvisation, listening and analysis. In essence, this forms a special framework whereby musical creativity is perceived as a process directly related to music information seeking and use and is influenced by the way and the seeking conditions but also by the availability and use of the various music information sources.

Perspectives and suggestions for the IAML
In recent years, IAML’s presence in cultural life has boosted the field of music librarianship with the better use of new music librarians, musicologists and information scientists, who deal professionally with music library issues in all their aspects (Kostagiolas, Lavranos, Martzoukou and Papadatos, 2015). According to the above, and in the context of the need for cooperation among all those involved in the field of music librarianship, the following paragraphs describe perspectives and practices whose implementation can highlight the role of IAML in enhancing musical creativity.

Information literacy for musical creativity
Information literacy skills of individuals relate to their ability to recognize the information needs arising within different socioeconomic contexts and the ability to use effective information systems and services (Martzoukou and Sayyad, 2017). According to Bawden (2001), key features of information literacy join the nature and the widening of required information, the effective and efficient access to information, the critical evaluation of information and its sources, the ability to integrate selective information into a cognitive and a valuable system of individuals, the effective use of information to meet a specific purpose at an individual and collective level, as well as the understanding of the various economic, legal and social issues surrounding the ethical and legal use of information. As for music information literacy, key features include music information needs, access, evaluation, presentation and understanding of the ethical use of music information (Manus, 2009). Music information literacy skill cultivation will help finding key reference sources, musical compositions and performances of works, critics, music databases, audiovisual material and more (Cary and Sampsel, 2006). It may also enhance the proper use of music information systems and services, the choice of the proper means for transferring music information,
methods and practices’ implementation of musical work’s presentation and the copying of recorded musical pieces in various media (Ashley et al., 2012). Moreover, music information literacy skill cultivation relates to the moral use of information, the knowledge of intellectual rights, the understanding of music retrieval methods from the internet and the reference methods of music information material (Manus, 2009).

According to Lavranos et al. (2015), music information literacy skill cultivation is one of the most important factors driving musical creativity, since it helps to overcome major inhibiting factors arising during music information seeking and use. For example, music information literacy skills help in finding and solving problems related to the quality and size of online music information as well as the lack of confidence in music information seeking and use in various forms (always within the creative activities of musicians). Therefore, music information literacy skill cultivation within the framework of musical creativity may act as a vehicle to cut the number of personal and environmental inhibiting factors that arise in the process of music information seeking and use. In this sense, the current study proposes the development of conventional and distance learning information literacy programs, on behalf of the IAML’s function, with the aim of enhancing musical creativity through information for the benefit of various music communities. The aim of the proposed learning programs will be to highlight music information seeking and use contribution in supporting musical creativity, which is a key part and an essential element for creative activities such as education, composition, performance, improvisation, listening and analysis.

Enhancing the digital presence of all musical trends

The long tail effect refers to the demand distribution in the digital economy in favor of unpopular options (Anderson, 2004). This is a phenomenon which relates to the retail trade and has to do with achieving greater profit by placing small quantities of many of different products, and not placing large quantities of a few popular products. As shown in Figure 1, the long tail effect is schematically represented as a curved line. It consists of two sections, the head which determines the demand for fewer popularly numbered products and the long tail that determines the demand of most in number but not popular products. The critical point, thereby, which determines whether the demand distribution has a long tail, is the cost of storage and distribution as well. If it is small (e.g. storage of products in a digital format), there is a significant increase of unpopular product availability.

The long tail effect initially applied in investigating the effects of internet use in the disposal of electronic products. In recent years, it applies in a wide context of physical and

![Figure 1. Schematic representation of the long tail effect](image-url)
social processes of modern human activity such as culture, information, politics, service provision, and more. In that sense, the long tail effect applies also in the field of library collection development and information services’ provision, especially regarding digital information sources (Anderson, 2008). While trying to interpret the long tail effect in the field of libraries, Kuhlthau (2004) provides in her research a detailed evaluation of a library information service with an emphasis on information technology resource use. Moreover, she investigates users’ information behavior characteristics during the process of search and use of an item of this particular library collection. According to Kuhlthau (1991), the demand in a library is greatly influenced by internal and external factors that direct user’s decision about borrowing or not a particular item. This interprets the principle of Pareto or 80/20 rule, where the presumptions allocate according to their popularity to which 80 percent of the library’s borrowed documents correspond to 20 percent of the evidence in its collection (Kostagiolas et al., 2012). However, the Pareto principle has a drawback as it includes only the popular items that represent 20 percent and not the remaining 80 percent of the library’s collection. In addition, due to the increased use of electronic information systems and the digital resource availability, the demand for less popular objects growths, resulting in the shift to the right of the weight of the demand distribution curve of the collection. According to the above, this fact ceases the Pareto principle and applies the long tail effect (Dempsey, 2006; Brynjolfsson et al., 2006).

The long tail effect applies across the range of general and special libraries (Brown and Adler, 2008). In the case of music libraries, it refers to the demand for electronic music books, magazines and the remaining musical material distribution, but it also refers to music information service provision. As shown in Figure 2, the long tail effect is schematically illustrated in the demand distribution of music collections and music information service development. Keeping that in mind, in the context of music information seeking and use as a mechanism to enhance musical creativity, this study proposes the digital presence of all musical trends enhancement, on behalf of the IAML’s function, in the demand for music information services for the benefit of various music communities. This may lead to digital mechanisms’ creation, strengthening the supply and demand relationship for non-sovereign, unpopular music material, as well to the increase in the number of user options by strengthening the queue in the demand distribution curve (Holt, 2007). In addition, such a perspective may help increasing the effectiveness of the music information services provided, as well as improving the overall use of low demand materials of music libraries, resulting in musical creativity enhancement.

Enhancing the digital presence of all musical trends is a challenge for all those involved in the design of music library management strategies. This task requires musical material

![Figure 2. Schematic representation of the long tail effect under the demand distribution on the development of music collections and music information services](image-url)
digitization and electronic repository development which can give practical solutions to storage problems, while at the same time it can help improving the use of music information services and the resources of music collections accessibility. Additionally, it is possible to lead in shaping management policies to user demand allocation on the entire collection of music libraries. In this context, enhancing the digital presence of all musical trends in the demand of music information services may lead to the strengthening of music information seeking and use as a mechanism to enhance musical creativity.

**Strengthening culture of openness to a wider scale and the use of music information management software**

Culture of openness is a broader understanding of the fundamental concepts of information sharing, tolerance, equality, cooperation, justice and freedom of expression (Harnad, 2010). It is directly linked to the concept of free access, in the context of identifying, using and modifying any project. Detection capability depends on information availability about a specific project and refers to the exchange of this content. Usage ability allows the free, unrestricted use of the work or part of it while modifying ability refers to collaboration, promotion of changes and improvements to project content (UNESCO, 2015). According to Open Definition (2017), a project is open if meets the following conditions about its distribution:

- open license or status (the project should be in the public domain or available under an open license, which should be irreversible permitting the use, redistribution, modification, separation, collection, nondiscrimination against persons, groups or fields of activity, dissemination, application for any purpose and non-charging);
- open access (the project should be provided to the internet and free of charge);
- mechanical readability (the project should be provided in a form easily editable by a computer, its components should be easily accessible and can be modified); and
- open form (the project should be provided in an open form with no limitations and be readable by at least one free software).

Culture of openness applies in various areas of the socioeconomic environment (e.g. education, administration, economy, politics, etc.) including the information sector (Bertot et al., 2010). It also addresses actions and initiatives that can be developed by institutional information management bodies (e.g. libraries and archives, institutions and supervised organizations, professional and research bodies, museums, etc.) on access provision to existing information, development and implementation of free information management software as well as partial participation of the public in the formulation and implementation of free access policies and practices (Albee and Chen, 2014). In view of the above, the present study proposes the strengthening of the culture of openness, on behalf of the IAML's function, widely and the use of music information management software for the benefit of the various music communities. Through this procedure, it is possible to formulate policies and practices on the promotion of musical knowledge and activities of its institutional members. These refer in ensuring an openness regime creation as a horizontal element of all activities, in making sure the collection-related functions, in the storage and continuous delivery of music information, in using different music information channels by taking advantage of technology developments and in the partial participation of the public in the formulation and implementation of free access to music information.

It takes time to develop and exploit culture of openness in the context of accessing and distributing music information. However, strengthening culture of openness as part of the identification, use and modification of music information is important for partnership
development between its institutional bodies and for the free flow of information between them (Higman and Pinfield, 2015). Moreover, the exploitation of free information and internet technologies can be an important tool for increasing the accessibility and availability of music information and communication between its management bodies, creating the conditions for improving the level of openness by providing practical solutions for bridging musical knowledge and digital divide between different music communities. Therefore, strengthening culture of openness to a wider scale and in using music information management software may be an important factor in enhancing musical creativity.

Synergies’ stimulation between music information management organizations

Nowadays, the need for providing high-quality information services coupled with the evolutions in information and communication technologies allows the development of actions on the interconnection and stimulation of synergies between information management organizations (e.g. libraries and archives, institutions and supervised organizations, professional and research bodies, museums, etc.) (Kostagiolas, Lavranos, Martzoukou and Papadatos, 2015). Creating collaborative networks between information management organizations aims to coordinate activities, increase collection availability while saving money, adopt and carry out technological innovations, expand and improve the service of user groups, as well as improve information services quality (e.g. reciprocal lending privileges, expanding the interlibrary loan service, developing special communication services, developing user training programs, developing a common website, etc.) (Hirshon, 1999; Chae et al., 2005). Synergies’ interconnection and stimulation between information management bodies aim to set up common goals, but also to discuss common problems by finding common solutions, including the ability to discuss problems at a given hierarchical level higher than that they appear (Carayannis, 1999; Rosa and Storey, 2016).

However, the effort to set up collaborative networks between information management organizations needs to overcome certain inhibitory factors such as different categorization among information management organizations, different institutional priorities and partnerships, different sizes in user groups, budgets and infrastructures, different know-how, different collections, different legal status and more (Kumar and van Dissel, 1996; Hirshon, 1999). Furthermore, information management organizations should understand that taking part in cooperative networks requires reciprocity and that those decisions taken in this context have an impact on all participants. Given the circumstances mentioned above, this study proposes, on behalf of the IAML’s function, to undertake initiatives on the linkage and stimulation of synergies between music information management organizations for the benefit of the various music communities, while enhancing their cultural, scientific, educational and social role. In essence, it proposes initiatives for the interconnection between music libraries with the aim of creating a wider network to support musical information at an international and national level.

In particular, the prospect of linking and stimulating synergies between music information management organizations at the national level looks forward to a unified policy formation on access and availability of music information, to reach agreements on music information resources distribution, to set up a national music repository, to set a unified policy on technical infrastructure management, on the descriptive and thematic cataloging of the musical material, on providing music information services through specially formed joint internet portal, and more (Kostagiolas, Lavranos, Martzoukou and Papadatos, 2015). Actions that will also lead to significant savings in their operating costs as a collaborative scheme creation enables the sharing of certain parts of their funding. Therefore, the potential development of a collaborative network among music information
management organizations at a national level may lead to the access and distribution of musical information to new levels, while at the same time contributing to enhancing the musical creativity of the various music communities.

**Conclusions**

The focus of this paper was to demonstrate the crucial role of IAML in enhancing musical creativity. The present conceptual study presented theoretical and practical issues about music information management organizations function and especially that of IAML as a mechanism for enhancing musical creativity, as well as perspectives and suggestions for the interrelation between them were discussed. The outcomes of this brief review established a theoretical connection of music librarianship issues to musical creativity, and has also identified that musical creativity is directly linked to music information and to the operation of music libraries as it can be influenced by music information services availability and the information profile of the musicians involved. Furthermore, present conceptual study provides foundations for further discourse and research on topics related to music information employed for musical creativity in the context of music librarianship. An important issue that would be of interest for further research in the proposed framework is the assessment and the measurement of musical creativity. The assessment of musical creativity in relation to music information behavior faces many challenges. A very interesting approach that could be implemented in the proposed framework is that of Barbot and Lubart (2012), who attempted to discuss issues about the assessment and measurement of musical creativity by developing a method called musical expression test. The test was developed as a novel technique integrating the approach of divergent thinking measurement in music, analysis of the creative process in music, as well as musical product-based assessment. This specific test was designed to cover the whole range of ages (children, adolescents, adults) with or without prior musical knowledge, aiming on the assessment of divergent exploratory and convergent integrative thinking process in music which contain the use of information behavior as a problem-solving natural process and are measured through four standardized musical activities (exploration, alternative uses, composition, improvisation). The measurement of the test involves a product-based level of analysis, focusing on the produced musical piece which involves the consensual assessment technique (a test developed by Amabile in 1982 in order to measure and assess domain-specific creativity), as well as a behavioral level of analysis focusing on exploratory behaviors and assessing divergent process through a systematic observation protocol. In conclusion, the significance and originality of the current study should be noted since it is the first study providing theoretical and practical issues linking music librarianship with musical creativity.

**References**


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