



Creativity and innovation in libraries and information centers: a forward-looking vision

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Received: 10 /01 / 2024

Accepted: 14 /06 / 2024

Published: 12 /10 / 2024

Abstract:

This study aims to identify creativity and innovation in libraries and information centers as one of the most important bets and strategies that can be adopted by libraries and information centers that want to develop their reality and enter the door of competition . We have concluded that creativity is more than just a strategic tool for achieving excellence and success in libraries and information centers. Rather, it is a real indicator of the library's arrival at the rank of an innovative library, which is the motto of modern organizations at the present time. It remains to encourage information specialists to be creative and innovative, and to open the way for specialists. Information to unleash creative energies is the main challenge facing libraries and information centers to achieve their competitive advantage.

Keywords:

creative culture; creative information specialist; creativity; innovation; libraries and information centers; smart library,

I. INTRODUCTION

Libraries and information centers live in a complex and rapidly changing information environment dominated by many concepts such as information globalization, digital environment and smart libraries, as well as competitive advantage and total quality management, which has become a bet for information institutions and based on the fact that the library is an institution Developing and developing, according to one of the five most important principles of libraries, which was developed by the scientist Ranganatan. Growth and development are mainly linked to creativity and innovation, which has become a fundamental starting point for modern libraries. They have become open workshops due to development, renewal and modernization at all levels. Moreover, because libraries and information centers always seek leadership and achieve a competitive advantage, the only option before them today is to encourage creative thinking among information specialists on the one hand and to embrace and accompany creative works on the other hand.

On the other hand, the information specialist is searching for his identity - especially the digital identity - in light of the current conditions and is looking for self-realization in the environment of libraries and information centers. Often we find that self-realization is an inevitable result of the process of creativity and innovation because there is a close relationship between creativity, innovation and self-realization. Because the important thing is the results, the more innovations there are, the more the information specialist imposes himself and achieves his self-identity.

Despite the importance of the subject, it did not receive enough attention for scientific studies in the field of library science, in contrast to the interest of other fields in studying this subject, and this is what we tried to research through our study, which looks at the following problem:

What is creativity in libraries and information centers? What is the role of the information specialist in encouraging creativity?

It includes a set of questions:

What is the importance of creativity in libraries and information centers?

- How does the information specialist contribute to encouraging creativity in libraries and information centers?
- What are the mechanisms to encourage creativity in libraries and information centers?
- What are the obstacles to creativity in libraries and information centers?

-Objectives of the Study

This study aims to achieve several objectives, some of which we present as follows:

- Defining the importance of creativity as a strategic option to raise the competitiveness of libraries and information centers.
- Identifying the aspects that must be available to achieve creativity in libraries and information centers.
- Standing on the obstacles to creativity in libraries and information centers.
- Submitting proposals to provide a creative environment in libraries and information centers.
- Developing a vision for a methodology to encourage creativity in libraries and information centers.

- Importance of the Study:

The importance of the study stems from the role of creativity and innovation in libraries and information centers. This topic is of great importance, as it has been raised firmly in the library and informatics arena in recent times due to several considerations related to the work environment of libraries and information centers. On the one hand, the beneficiaries and their needs, and on the other hand, the tasks and functions that the information specialist performs, especially in terms of technology, change.

-Research Methodology

The descriptive approach was used in our study to suit its suitability for presenting and analyzing the subject of creativity and innovation.

1. The theoretical framework for creativity and innovation.

1.1.The Concept of Creativity

There is no specific, explicit and agreed-upon definition of the term creativity, and below we will review the most important of these definitions:

Cowan mentioned in the Dictionary of the Contemporary Arabic Language that "creativity carries several meanings that refer to the same meaning, which is innovation, originality, achievement, new formation, strange thing, uniqueness, and modernity" (Cowan, 1998)

Furthermore, it was defined in the human resources management dictionary as "finding new ways of working or modern ideas in solving problems that lead to an increase in work efficiency and the capabilities of its employees" (Sahhaf, 2003)

Ismail Murad defines it as "continuous development, modification, and improvement of invention outputs and discoveries with the aim of reaching better performance, whether in operations or product (Murad, 2015).

Ismail Murad also mentions that "Creativity has become for the modern organization an imperative and inevitable necessity, especially with the current intensification of competition in the markets. Technological innovation plays an important role in distinguishing the organization's performance and enhancing its competitive capabilities" (Murad, 2015)

It is defined as "the ability to come up with something new in any field of science, art or life in general, and familiar ways of dealing in unfamiliar ways can be described as creativity" (Kazem)

Charles Davies defines it as "doing something that has not been done before and includes perception, invention and investment" (Beerer, 2007)

. It is also defined as it "involves the production of certain goods and services by an enterprise or the use of new methods for inputs that it has not previously used, and this means making certain technological changes" (Al-Shamaa, 2000)

"Creativity expresses the nature of new technological changes, while invention is part of the creativity process" (Al-Shamaa, 2000)

Most definitions have focused on the fact that creativity requires bringing the new, whether for the first time or finding a new image of something that previously existed through improvement or development. Suppose this concept is dropped in the field of libraries and information. In that case, it can be said that creativity is an organizational and library behaviour that requires adoption and The use of new ideas and methods that contribute to achieving the goals of the library as an example of these innovations and additions in libraries, especially in light of the current health conditions, where creativity appeared more and more and was linked to the technological aspect.

Creativity intersects with many neighbouring terms used interchangeably, as if they have the same meaning, but in reality, it is not. Ideas into action (Abbas, 2010)

1.2. Justifications and reasons for adopting creativity and innovation in libraries and information centers

Some several reasons and justifications force the information specialist to adopt creativity and innovation in libraries and information centers, which we mention as follows:

- Challenges of the current information and office environment, characterized by complexity and innovation.
- The inevitability and necessity of change and keeping pace with developments.
- The intense competitive environment that characterizes the work of libraries and information centers.
- The exceptional circumstances that libraries and information centers are going through, similar to the health conditions related to the Covid 19 pandemic.
- The information specialist's pursuit of self-fulfilment

1.3. Objectives of creativity and innovation in libraries and information centers:

- Opening new horizons and opportunities for libraries and information centers to enhance their status and attract new beneficiaries.

- The ability to adapt and meet the needs of beneficiaries.
- Being open to new ideas and responding effectively to opportunities, challenges and responsibilities to manage risks and adapting to changes” (Tuwer, 2021)
- Making the library a space for creativity and innovation and, simultaneously, an incubator for creativity and innovation.
- Upgrading the clerical profession by moving the information specialist from a mere clerical to a creative and innovative information specialist.
- Moving from static and undeveloped libraries to creative and developing libraries.

1.4. The importance of creativity and innovation in libraries and information centers:

Libraries and information centers seek to achieve the highest levels of excellence and leadership, which is why they need to provide the conditions and conditions necessary for that, and perhaps this leads to encouraging the process of creativity and innovation that would make a difference and develop different services, products and research tools. It works on creativity and innovation of new methods and added values.

Creativity is an essential component and stake that libraries and information centers can adopt if they want to comprehensively develop their reality and enter the door of competition. Creativity is too big to be a strategic tool to achieve excellence and success for libraries and information centers. It is the motto of economic institutions at present.

Moreover, creativity in libraries and information centers is a process that has yet to be isolated and isolated. However, it is the result of integration, compatibility, cooperation and collective action organized by all library components. Creativity is also a fundamental and essential engine for the growth and development of libraries and information centers. Creativity in service involves a method of directed attraction. Creativity for libraries is characterized by its character, depending on the characteristics of these information institutions.

1.5. Creativity characteristics of information specialists in libraries and information centers:

Creativity, in its essence, is no different in libraries and information centers than in other organizations, except that libraries and information centers as service institutions have a unique nature. Creativity can appear through the provision of new services developed, the provision of old services in innovative ways and modern technical methods, and the development of existing services based on the needs of Beneficiaries and their desires; market studies, libraries and information centers are different from other service institutions. Creativity in services may be purely technical.

Creativity initially requires a creative person, or at least a person who is willing to do creativity, is enthusiastic about doing so and has a genuine will to lead the idea of creativity. Among the characteristics and qualities that must be available in a creative and innovative information specialist are the following:

- Good reception of the beneficiaries.
- Transforming the principle of working within the library from beneficiaries searching for information to information searching for beneficiaries.

Cognitive development is the preparation and creation of conditions and attitudes that lead to the emergence and formation of the individual's actual capabilities.

- Innovative marketing of information.

2. Creativity in libraries and information centers:

2.1. Types of Creativity in Libraries and Information Centers:

We can distinguish between several types of creativity in libraries and information centers similar to other organizations, which we mention as follows:

2.1.1 Total creativity (radical - radical):

It means providing new services and research tools or carrying out new functions and tasks entirely different from what the library used to do previously. Thus the library can achieve excellence that enables it to achieve a competitive advantage and create a creative library.

2.1.2 Gradual creativity (phased):

This creativity is achieved in libraries and information centers by introducing new services or research tools to the beneficiaries. However, gradually, this may appear in the form of modifications and improvements to the old services and products.

2.1.3 Organizational Creativity (Administrative):

It is related to those changes that occur at the level of the organizational structure of the library and its sub-components, and the re-engineering and design of its tasks, functions, services and various relationships, and organizational creativity can be at the level of bringing about modification and renewal in policies, strategies, and work methods.

2.1.4 Artistic Creativity:

Most of the activities carried out by the information specialist are technical operations. In light of the recent changes, innovation and creativity must be adopted to reach the performance of artistic works with advanced creative skills. This type of creativity is linked to scientific, artistic and literary creativity" (Al-Sarn, 2020)

2.1.5 Technological Creativity (technical):

The work of libraries has recently focused on using information technology for maximum utilization, and today the talk about the library has become exclusively linked to information technology. This necessitated the information specialist to adopt the principle of creativity and innovation to employ information technology and benefit from it.

2.1.6 Marketing Creativity (Promo):

It is mainly related to creating new tools and models for marketing information services, primarily through modern media and social networks for marketing and communication with beneficiaries.

2.2. Areas of Creativity in Libraries and Information Centers:

Libraries and information centers are a fertile field for carrying out creativity and innovation in all office work areas. Below we review the most critical areas of creativity and innovation in libraries and information centers:

- Finding new policies and strategies to run the work of libraries according to recent changes, especially in light of crises

- Restructuring the library by creating reciprocal relationships and strong links between the components of the library.

- Using modern technologies to perform jobs and tasks and providing services
- Find new ways to do routine work and compensate for it innovatively
- Creativity in services
- Creativity in research tools
- Creativity in technical and administrative processes
- Creativity in the relationship with the beneficiaries
- Creativity in business strategy
- Creativity in dealing with the external environment
- Creativity in the language of contemporary marketing

2.3. Mechanisms to encourage creativity in libraries and information centers:

Creativity and innovation can be encouraged in libraries and information centers through the following:

- Encouraging information specialists and urging them to carry out studies and research in this field.
- Holding periodic meetings, encouraging discussion and exchanging opinions and experiences.
- Work to achieve a free flow of information by opening effective channels of communication that allow the flow of information between library staff.
- Support and encourage creative competition among library staff.
- “Providing an organizational climate that is considered an essential element for establishing creativity and its system, which has positive effects in increasing the possibility of creativity within the organization” (Al-Salem, 2005)

3. The information specialist and his role in encouraging creativity in libraries and information centers.

3.1. Innovative leadership

The ability to create and innovate makes the information specialist an innovative leader with the ability to analyze and anticipate, and to find innovative solutions and strategies, based on investing in innovative ways in the existing and available financial and human resources and office groups, “the administration plays an important role in benefiting from Creative thinking and that By encouraging creativity, then innovation is part of continuous improvement, so while institutions can use some practices to improve their products and existing operations permanently and fundamentally, innovation can promote the achievement of large leaps and the establishment of new starting points and works to improve those products” (Hamidi2021)

3.2.Creative information specialist and smart librarian:

A creative information specialist is a person who has a strong and urgent desire for continuous development and renewal. She is a person who does not prefer stability over a professional situation or skills but is always looking for a new work atmosphere with innovations and advanced skills. He also loves curiosity and seeks everything new while working on developing and renewing the old. He also has a strong appetite for the future through research, development and foresight, requiring constant and continuous information vigilance.

The essential creation that requires the creative information specialist to deal with is the intelligent library, which Yan defines as a model for a more innovative way to change the way of interacting with users and library systems using a new generation of information technology. To improve clarity, flexibility, and responsiveness to interaction, services, and intelligent management” (Yan, 2010), and “a smart library refers to the services provided by the library, which are interactive, innovative, and rich in information” (Sarhan)

Suppose the intelligent library is the product of a creative and innovative thought that distinguishes the information specialist. In that case, working within this new environment and developing the intelligent library requires more innovations, especially concerning the services provided to the beneficiaries.

3.3.How do we make a creative information specialist?

The process of creativity in libraries and information centers mainly needs a creative information specialist, and in order for this to happen, the following must be achieved:

3.3.1. A sense of curiosity:

The information specialist, in general, enjoys far-sightedness and broad-mindedness, which makes him a creative person who loves exploration and discovery, thus breaking the barriers of wonder and amazement in order to become an individual who is receptive to everything new and working to develop and improve everything old.

3.3.2. Desire for continuous development

Obtaining a creative information specialist requires the desire to develop himself through continuous education and training. Undoubtedly, self-learning and lifelong learning are two fundamental pillars of creativity and innovation. At the same time, it can be said that creativity and innovation are indicators To continue learning for the information specialist. The library work environment now requires an interactive information specialist who can adapt to all modern work environments, which makes him more motivated towards continuous development and innovation.

3.3.3. *Accepting the new and not being afraid of the developed ideas:*

Sometimes we find that the information specialist thinks that his innovation and creativity will bring him problems or undesirable effects or that he will complicate office work. Therefore he is afraid of new ideas, but we, as specialists in the field of libraries and information, encourage creativity and innovation and ensure that it is not an adventure Or a risk. However, it is evidence of striving towards the best, which is the path to leadership and excellence.

3.3.4. The ability to monitor, evaluate and verify new creative ideas:

If we have a creative information specialist, he does not need to convince us of new ideas, but he is the one who convinces others of that and encourages them to be creative and innovative.

3.3.5 Flexibility in dealing with new creative ideas:

The creative information specialist, who can be found open and flexible, can coexist and deal with all new creative and innovative ideas and is not a petrified individual who closes in on himself and fights everything new.

3.3.6. Strong interest in the future:

The creative information specialist is the one who makes the future of libraries by changing their present by presenting new and developed ideas to change the working methods of the library or information center, whether it is related to technical or administrative operations or information services provided to beneficiaries, or related to those technologies used, especially We know that libraries in the modern environment have become an open and ever-changing workshop.

3.4. information Specialist and creative culture in libraries and information centers:

Information specialists and library management, in particular, can take many measures that will enhance the creativity and innovation in the library, especially those related to adapting to changes and developments, especially in crises such as the Covid-19 crisis.

Creativity indicates that the information specialist has a flexible thought that can transform and the ability to conscious change. Creativity also makes the information specialist a liberal person in his thoughts and work, committed to the rules of common sense, especially as we know that most of the work the information specialist does is described as science and art. This second part requires skills and an artistic touch in which creativity and the spirit of innovation are embodied, which makes him perform artistic works, for example, that his peers do, but in different ways from them.

Libraries and information centers have become incubators for creativity and innovation. It is the case with most information institutions that have chosen a new organizational culture that encourages creativity and innovation and provides the necessary framework and conditions for creating and implementing creative ideas. Therefore an innovative and creative culture must be one of the components of The essential organizational culture approved by libraries and information centers.

Libraries constitute a creative environment and are the source and cradle of all innovations in all fields, to which the results of these creations return. However, this requires a creative information specialist to lead the locomotive of creativity and innovation in libraries and information centers and work to spread the culture of creativity and innovation, accompany the creators, and encourage them to create and innovate.

4. Creativity, innovation and current issues in libraries and information centers:

4.1.. Knowledge management and encouragement of creativity in libraries and information centers:

J. Harris and A. Henderson believe that knowledge constitutes one of the essential elements within an integrated chain that begins with signals and progresses to data, then to information, then to knowledge, then to wisdom (which is an adequate basis for creativity (Abbas, 2010)”) Innovation.If knowledge management aims to organize the accumulation of knowledge and direct it to serve creativity and innovation, then knowledge is the main engine of the creative process.

Knowledge management can be a solid ground and a knowledge base for developing creativity and innovation. The latter can also be a tool for managing knowledge in innovative ways. Therefore, libraries and information centers are required to manage knowledge at their level and to allow information specialists to unleash their creative energies and serve the library.

4.2. Creativity in libraries and information centers in light of crises

Crises are considered a real opportunity to change things and invest in the situation to reach a better level. Some see that the opportunity is disguised as a crisis; therefore, the crisis is a stimulus and an incentive to exploit the time. Here the actual energies begin to emerge and emerge through creativity and innovation, so it is necessary to open The field for the library's human resources to transform them into creative energies.

Many libraries were static, and hardly any effect was seen in the library and information arena. However, in light of the Covid-19 crisis, these libraries have become very important, thanks to the activities and services developed because of these circumstances. They came as a result of creativity and innovation that revealed to us the personality of The real information specialist and the professionalism and craftsmanship he enjoys. In this context, creativity is born from the womb of the crisis.

4.3.. The role of strategic vigilance and information monitoring in achieving creativity in libraries and information centers

Modern organizations rely on a set of practical strategies and methods to control the internal and external environments by controlling information and its various sources while simultaneously helping to create creative ideas. This information is strategic, social, political, scientific, technological, or specific to the organization's environment and all the variables, opportunities and dangers that exist in it.

It consists in collecting, processing and storing information and all the strong and weak signals emanating from the internal and external environment of the organization. (Dhenin & Dhenin, 1998)

J-M Ribault defined it as "the comprehensive and intelligent monitoring of the organization's environment to obtain important information that brings the future" (Taybawi, 2010)

In the same context, organizations always use information monitoring, which is defined as: "a set of methods for collecting, analyzing, disseminating and using useful information to preserve the survival of the organization" (Mustapha, 2006)

Accordingly, if these concepts are introduced and invested in the field of libraries and information, the information specialist's strategic vigilance and information monitoring will make him face a knowledge base to revive his creative and innovative thought.

Therefore, he must be strategically vigilant and an informational monitor to be freed from inertia and become a creative and innovative person. Strategic vigilance and informational monitoring are among the tools and strategies that libraries and information centers adopt to maintain their position on the one hand and adapt to the internal and external environment on the one hand. On the other hand, creativity and innovation come as an added value and a variable dependent on these two processes.

4.4. Obstacles to creativity in libraries and information centers

- Maintaining the status quo in libraries and information centers
- Lack of incentives of all kinds to change the current situation
- The prevailing organizational culture in libraries and information centers must encourage creativity and innovation
- Fear of failure of creativity and innovation
- Lack of job loyalty that inspires creativity and innovation

II. Results and discussion :

- The creativity of the information specialist stems from his constant pursuit of self-realization, so he is constantly concerned about his profession.
- Creativity is not an administrative solution, not a development project, but rather a way of life and work for information specialists.
- Creativity is one of the essential tools to achieve competitive advantage and bring about change in libraries and information centers.
- Knowledge management is a solid ground and knowledge base for developing creativity in libraries and information centers.
- Creativity is a source of growth and development for the library. Creativity creates a growing library.
- Creativity contributes to achieving comprehensive quality and enhances competitive advantage in libraries and information centers.
- Lifelong learning is one of the most important tributaries of creativity.
- "Creativity is not a single or random act, but rather an integrated, continuous and permanent process that forms an integral part of the overall strategy of the institution" (Hamidi, The Role of Creativity and Innovation in Enhancing the Competitive Advantage of Algerian Enterprises, 2021)
- Creativity creates the appropriate environment to provide new services and meet the needs of beneficiaries.
- Libraries need to be more creative, they are rigid and failed libraries, and they need the ability to adapt.

III. Conclusion:

Through our study, we have concluded that creativity is the essential component and stake that libraries and information centers can adopt if they want to develop their reality and enter the door of competition from its wide door. Creativity is too big to be a strategic tool to achieve excellence and success for libraries and information centers. The library has indeed reached the rank of a creative library, which is the motto of economic institutions. The

beneficiary does not necessarily expect modern and complex services but services that meet his needs, even if they are simple. Instead, it is sufficient only for them to be innovative ways.

It can be said that "creativity and innovation is the most guaranteed strategic option for organizations in the face of various possible disturbances in the environment and one of the most important basic pillars in building competitive advantages for organizations" (Ghalim, 2021). Therefore the main bet remains in front of libraries and information centers seeking a competitive advantage. It encourages creativity, creates a creative environment, and opens the way for the information specialist to unleash his creative energies.

- Reactivating the role of the information specialist, encouraging him and enhancing his creativity
- Providing the appropriate conditions for embracing creative thought in libraries and information centers
- To learn about the successful experiences in the field of creativity, not only in libraries and information centers, but also those related to service organizations and other business organizations, and to try to emulate them and benefit from them in the field of library work
- Encouraging research laboratories to study the subject and delve into it more, and to accompany the application of some successful experiments and study them scientifically
- Linking the culture of creativity with entrepreneurial thought in libraries and information centers
- Developing skills in order to establish innovative libraries and information centers

Encouraging creativity in libraries and information centers

- Developing the creative skills of the information specialist
- Dissemination of creations in libraries and information centers and introducing them and their owners
- Encouraging lifelong learning because it is one of the most important tributaries of creativity and innovation

- Referrals and references:

• Books :

-Cowan,j.Milton(1998) A Dictionary of modern written arabic ;3rd Ed.London ;Macdonld ;Evens LTD .

- Habib sahhaf,(2003) .“dictionary of humain resources management”, librarydu Liban publishers, Beirut.
- Rad, Ismail (2015). The Role of Creativity in Raising the Competitiveness of Service Institutions: A Case Study of the Kuwaiti Telecom Company "Ooredoo". Journal of Finance and Markets. MG 2.
- Bear Cook. (2007), translated by Al-Amiri, Khaled. Creativity management. Cairo: Dar Al Farouk,
- Al-Shamaa, Khalil Muhammad Hassan, (2000). Khudair Kazem Hammoud. organization theory. Amman: Dar Al Masirah,
- Al-Sarn, Raad, edited by Boutros Hallaq, (2020) Al-Shaarawy, Ahmed, Al-Ainawi, Ilham. Creativity and Innovation Management. Syria: Syrian Virtual University
- Al-Salem, Moayad Saeed. (2005) Organization Theory. 2nd Edition. Amman: Dar Wael for Publishing and Distribution.
- J. Harris and A. Henderson, ", quoting from A Better Mythology for System design", Proceedings of The Conference on Human Factors in Computing Systems (New York : ACM Press.
- Dhenin J L, Fournier B, (1998), 50 Thèmes d’initiationa l’économie : Source d’entreprise, Edition Bréal, Paris,France.
-
- Mustapha djenaas,abderrezak benhabib, (2006), veille stratégique et outils d'aide à la décision dans lesentreprise algériennes cas des entreprises des services,lescahiers du mecas,n 2 avril,faculté des sciences économiques et de gestion,université aboubakr belkaid tlemcen,algérie,

- Journal article :

- Abbas, Najma. The role of knowledge management and its implications for creativity in contemporary business organizations. Journal of Human and Social Sciences. University of Batna. MG 11
- Abbas, star. The role of knowledge management and its implications for creativity in contemporary business organizations. Journal of Human Sciences And Social. University of Batna. Vol. 11.
- Hamidi . Abd Errezak.(2021), the role of creativity and innovation In enhancing the competitive advantage of Algerian enterprises.Revue des Réformes Economiques et Intégration En Economie Mondiale.vol 15,N1.
- Ahmed Taybawi. (2015). Strategic vigilance as a catalyst for creativity in the economic enterprise. Creativity Magazine
- Yan, D. (2010), “Smart library based on internet of things”, Journal of Library Science,Vol. 32 No. 7
- Tuwair, Mubarakah, Mohieddin Mahmoud Omar. (2021). The role of strategic vigilance in promoting creativity in the economic enterprise, a case study of the Naftal Corporation. Journal of Business Administration and Economic Studies. Vol. 07.
- Hamidi, Abd al-Razzaq, Ibn Antar, Abd al-Wahhab, (2021). The role of creativity and innovation in enhancing the competitive advantage of Algerian enterprises. Journal of Economic Reforms and Integration into the Global Economy. Vol. 15,

- Internet websites:

- Kazem, Ammar.(2023)Creativity Link. (2023) accessed on, available at: <https://www.balagh.com/article/%D8%A8%D9%88%D8%B5%D9%84%D8%A9-%D8%A7%D9%84%D8%A5%D8%A8%D8%AF%D8%A7%D8%B9>(consulted on 4/01/2023)
- Sarhan, Ahmed El-Sayed. (2023)Smart libraries. Available at: <https://academy.aruc.org/blog/index.php?entryid=9>(consulted on : 6/01/2023).