

Green marketing in public libraries is a catalyst for sustainable development: Yahia Bouaziz Library in Mascara

التسويق الأخضر بالمكتبات العمومية حافز للتنمية المستدامة

مكتبة يحيى بوعزيز بمعسكر

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Abstract:

This article discusses the role of public libraries in Algeria as marketing tools and strategic partners in achieving sustainable development through environmental practices. It examines the importance of this transformation and its goals through a case study of the "Yahya Bouaziz" Public Library, which serves as an applied model for achieving green transformation and its impact on libraries' performance and community participation. Using a descriptive analytical method, the research highlights the integration of sustainability principles into library strategies and how green transformation can positively impact the environmental, social, and economic elements of both the library and the surrounding community.

The study emphasizes the importance of environmentally friendly methods in improving the library's performance and image and successfully contributing to achieving sustainable development.

This study concluded that the Yahya Bouaziz Public Library has the capabilities that enable it in the future to be a green library and contribute to achieving sustainable development goals, serving the environment and providing green services, improving community interaction with the library based on environmental awareness, and enhancing sustainability in its performance. In addition, green transformation can enhance its ability to achieve sustainable development goals and meet the aspirations of beneficiaries and society in the long term .

Keywords: green library ; environmental sustainability ; green marketing, public library ; ecological sustainability ; sustainable development ; Yahia Bouaziz Library ; mascara.

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ملخص:

يناقش هذا المقال دور المكتبات العامة في الجزائر كأدوات تسويقية وشركاء استراتيجيين في تحقيق التنمية المستدامة من خلال الممارسات البيئية. ويبحث في أهمية هذا التحول وأهدافه من خلال دراسة حالة مكتبة "يحيى بوعزيز" العامة، والتي تعد بمثابة نموذج تطبيقي لتحقيق التحول الأخضر وتأثيره على أداء المكتبات والمشاركة المجتمعية. باستخدام الأسلوب الوصفي التحليلي، يسلط البحث الضوء على دمج مبادئ الاستدامة في استراتيجيات المكتبات وكيف يمكن أن يؤثر التحول الأخضر بشكل إيجابي على العناصر البيئية والاجتماعية والاقتصادية لكل من المكتبة والمجتمع المحيط بها.

وتؤكد الدراسة على أهمية الأساليب الصديقة للبيئة في تحسين أداء المكتبة وصورتها، والمساهمة بنجاح في تحقيق التنمية المستدامة.

فقد خلصت هذه الدراسة إلى أن المكتبة العمومية يحيى بوعزيز تتمتع بمقومات تمكنها مستقبلا لكي تكون مكتبة خضراء وتساهم في تحقيق أهداف التنمية المستدامة وتخدم البيئة وتقدم خدمات خضراء، وأن تحسين تفاعل المجتمع مع المكتبة بناءً على الوعي البيئي، وتعزيز الاستدامة في أداؤها. بالإضافة إلى ذلك، يمكن أن يؤدي التحول الأخضر إلى تعزيز قدرتها على تحقيق أهداف التنمية المستدامة وتلبية تطلعات المستفيدين والمجتمع في المدى البعيد.

الكلمات المفتاحية: المكتبة الخضراء ؛ الاستدامة البيئية؛ التسويق الأخضر ؛ المكتبة العمومية ؛ الاستدامة الايكولوجية ؛ التنمية المستدامة ؛ مكتبة يحيى بوعزيز؛ معسكر.

1.Introduction

Public libraries in Algeria play a crucial role in the country's cultural and educational infrastructure, promoting sustainable development and green marketing. They not only spread the culture of environmental sustainability but also represent this culture through their services to the public. Environmental sustainability is integral to libraries' marketing policies as a social entity, and with simple funding, libraries can achieve environmental awareness. Achieving environmental awareness requires effective activities in developing relationships with other institutions, such as Friends of the Library groups, school projects, suppliers, and library beneficiaries. Integrating sustainability into public libraries' marketing models can strategically attract visitors and enhance community participation. The case study of the public library "Yahya Bouaziz Mascara" demonstrates how adopting environmentally-oriented practices can strengthen the library's relationship with the public and advance sustainable development goals. Public libraries can embody traditional knowledge repositories and serve as catalysts for change and champions of sustainable development. Using this trend as a tool to market their services is what prompted us to ask the following questions:

- What strategies and tools can be employed to transform public libraries into eco-friendly entities?
- What programs and services can be offered in public libraries to enhance environmental awareness and promote sustainable development?
- What role does collaboration with local partners and relevant institutions play in achieving the green transformation of the public library of Yahia Bouaziz?

2. Hypotheses

1.3. Transforming the public library into a green one can boost its reputation and attract more patrons by integrating environmental sustainability concepts into its operations, such as waste management and building design.

2.3. Providing services and programs that promote environmental awareness and encourage sustainable development contributes to making the library a significant focal point in the community.

3.3. Collaborating with local partners and relevant institutions enhances the ability of the library under study to achieve the green transformation and attain sustainable development.

3. Importance of the Study

This study explores public libraries' attitudes towards transitioning to green libraries, highlighting their purpose as a novel approach for community marketing and sustainable development. It acknowledges libraries as active partners in this endeavor.

emphasizing the following points:

- raising awareness about the role of public libraries in sustainable development and promoting environmental conservation.
- Providing an attractive and sustainable environment for visitors and users in public libraries.
- Utilizing the transition to green practices as an effective marketing tool to attract more visitors and enhance the library's user base

4. Study Objectives

- Define the concepts of green libraries, ecological sustainability, and sustainable development.
- Study the impact of transitioning to green practices on attracting visitors and increasing the utilization of public libraries in the Mascara region.
- Understand the role of transitioning to green practices in promoting awareness of sustainable development and adopting sustainable behaviors in society.
- The text outlines the transformations and directions of public libraries towards green practices, emphasizing ecological sustainability as a marketing strategy, and the social role of these libraries.
- Identifying the potential challenges and opportunities for implementing the green transition strategy within the selected model.

5. Study Methodology

Scientific research is a systematic investigation aimed at adding knowledge through scientific selection and solving study problems. The descriptive-analytical methodology was used for conceptual purposes and analysis of interview and observation data.

6. Study Sample

The study sample included a library branch chosen for its relevance to the research topic, aiming to gather comprehensive information to address the research questions and problem statement.

7. Data Collection Tools

The study utilized various methods and tools to gather data on a phenomenon, including observation as an objective tool and interviews as a highly accurate method. Observation was considered an essential tool, while interviews were conducted with questions addressing specific ideas, making them a valuable tool for the research.

8. Previous Studies

The subject of our study is important and has been studied in scientific literature. Here are some previous studies that have addressed this topic:

8.1 Uwimana, J., & Kumar, D. S. (2019). *The Role of Public Libraries in Promoting Sustainable Development: Challenges and Opportunities Study*: In this study, the role of public libraries in promoting sustainable development was explored. The challenges faced by libraries in fulfilling this role and the available opportunities were analyzed. The study focused on the general guidelines for green marketing in libraries and their role in promoting environmental awareness and sustainable practices in the community.

8.2 Zhang, J., & Zhang, J. (2018) *Green Marketing of Public Libraries: An Analysis of Marketing Strategies to Promote Sustainable Development.* Study: This study explores the marketing strategies used by public libraries to promote sustainable development. The study analyzes several strategies used, such as green building design, providing sustainable resources and services, and encouraging community participation in environmental initiatives.

8.3 Fontes, C., & Pereira, A. L. (2017). *The Role of Green Marketing in Achieving Sustainable Development in Public Libraries Study*:" This study focuses on the role of green marketing in achieving sustainable development in public libraries. Comparison between these studies In the first study, the focus was on the role of public libraries in promoting sustainable development and analyzing the challenges they face. This study can be compared to the second study, which focused on green marketing strategies used in public libraries.

The study compares green marketing strategies used in public libraries and their compatibility with achieving sustainable development, highlighting the role of green marketing in addressing these challenges. Through this comparison, the alignment of the strategies used in libraries with the role of green marketing in achieving sustainable development and environmental goals can be verified. In the third study, the focus was on the role of green marketing in achieving sustainable development in public libraries. (Karioja, 2013) This study can be compared to the first study, which explored the challenges and opportunities related to achieving sustainable development. The comparison between the first and third studies can shed light on the role of green marketing as a means to achieve sustainable development and overcome potential obstacles. By comparing these studies, effective measures and practices that can be taken in public libraries to promote green marketing and achieve sustainable development can be identified. For example, marketing strategies can be formulated to promote environmental awareness among visitors and encourage sustainable practices such as recycling and energy conservation. Additionally, designing and developing green buildings and providing sustainable services and resources in libraries can be done. Furthermore, enhancing

communication and collaboration with the local community and relevant external entities can promote sustainable development and achieve shared environmental goals. It is important for environmental practices in libraries to be based on thorough research and analysis to understand the needs and preferences of the public towards sustainability. (Hauke, 2013)

The study emphasizes the importance of green marketing in public libraries, highlighting its economic and social aspects. By adopting green practices, libraries can promote sustainable development and environmental awareness in their communities. The shift towards sustainability is a new beginning for libraries, and their survival depends on sufficient resources. As trusted educational centers, libraries are crucial partners in achieving sustainable development goals. The focus on activating these goals is essential. (Genovese, 2013)

9. Transitioning to Green: Green Libraries

The concept of green libraries is not a recent development. The movement began with Howard Armstrong's report in 1971, which highlighted the role of libraries in environmental education. In the 1980s and 1990s, there was limited literature on this topic. (Cynthia Nikitin & Jackson, (S.D))However, in 2002, during the 75th anniversary of the Glasgow Declaration, a statement was issued regarding libraries and sustainable development. The declaration emphasized the right of all citizens to a healthy environment and stated that the international library and information community should support and ensure that their interests consider the quality of life for all individuals, the natural environment, and the development of reading and information-seeking in ideal settings while respecting the surroundings. (Qutab, S. A., 2016) Librarians have made contributions and efforts to develop their libraries by reducing electricity consumption and utilizing environmentally friendly energy sources, aiming to achieve advanced levels of green library principles and sustainable development. As a result, libraries have become an important part of and a key partner with other economic and service institutions in preserving the environment and achieving sustainable development. Numerous definitions have emerged to describe green libraries, as well as the terminologies used to refer to them. (Library, 2007) A green library, or sustainable library, is a building designed in a way that minimizes negative impacts on the natural environment while enhancing the quality of its indoor environment. This is achieved through careful and deliberate site selection, the use of natural and biodegradable building materials, and the conservation and preservation of resources such as water, energy, and paper. (Ouahmed, 2022) Waste disposal is also managed through recycling and reuse practices. Other terms used to describe green libraries include ecological libraries, which contribute to creating a building that serves multiple generations while minimizing the negative effects of buildings on their surroundings. (U.S.green, U.S.green, G. B. (2008))

10. Ecological Sustainability and Marketing in Green Public Libraries

10.1 Marketing Customer satisfaction and meeting their needs, desires, and demands are fundamental elements in any marketing process. Although public libraries are not profit-oriented, their success relies on their effectiveness in meeting the explicit and implicit desires and needs of their customers. Customers are the individuals whose behavior we want to influence and with whom we want to develop long-term loyalty

towards our library offerings (Gupta, 2006, p. 06). However, thinking and acting responsibly means considering not only the specific demands of current users but also the demands of future generations. (Guechairi, 2023)

The importance of customer satisfaction and meeting needs are crucial in public libraries' marketing strategies, promoting sustainable communication, building strong relationships, and establishing long-term loyalty, regardless of profit generation.

The term "green marketing" is gaining attention in literature for its potential to promote libraries as environmentally responsible institutions, but it has not been extensively discussed. This highlights the need for further research and development in this field to raise awareness of environmental and sustainable issues.

The importance of implementing "greening" in libraries should be emphasized, encompassing not only products but also services and management, emphasizing the need for libraries to adopt sustainable and environmental practices across all aspects. (Chebahi, 2020)

Libraries are emphasized for their responsible thinking and conscious green practices, considering current user needs and future generations' needs, making them effective agents in achieving sustainable development and transmitting environmental and social values.

From a marketing perspective, the modern library is generally referred to as an information market, and the library user is a consumer of information. The ultimate goal of marketing here is to provide accurate information to the appropriate user at the right time (Das, 2008). On the other hand, practical examples show that libraries can offer more than just information. "A part of the fundamental purpose of libraries is to support people and build human capacity. Most agree that libraries should be places for nurturing human potential and ambition" (Albanese, 2013, p. 57). Libraries also contribute to building sustainable communities (Albanese, 2013) and examine the environmental responsibility of local communities (Boyden, 2000).

Discussing the role and purposes of libraries in the context of marketing and meeting user needs, the focus is placed on labeling the modern library as an "information marketplace." This reflects a shift in perception, where the library is no longer seen merely as a source of information but as an entity that provides and promotes information. In this context, the user is regarded as a consumer of information, emphasizing the importance of meeting their needs and desires. The ultimate goal of this type of marketing is to provide accurate and relevant information to the appropriate user at the right time, reflecting the evolution of library thinking towards achieving user satisfaction and effective interaction. (Benazza, 2022)

Libraries play a crucial role in supporting and empowering individuals, nurturing their capacities and aspirations, and fostering creative thinking and continuous learning. They aim to balance meeting public needs with achieving sustainable development within their local communities, fostering community-building and sustainable development.

It is evident that sustainability in general and environmental sustainability in particular are widespread and prominent features. "Sustainability is widely recognized as an integral part of contemporary life" (Karioja, 2013). Environmental awareness is more than just a trendy sign. "It is an ethics that needs to be deeply embedded in the actions and awareness of anyone genuinely interested in relieving the burden on nature, our

built world, and future generations (Scherer, 2013). Sustainability and the transition to a green approach have already reached library engineering, design, management, and services. After the "Green Library Movement" (Antonlli, 2008), meeting customer demands is certainly important. Thus, "creating a visible green image for the library is an important part of environmental work" (Sahavirta, 2013). However, a successful marketing strategy can be found.

The significance of sustainability in the modern world, particularly environmental sustainability, is emphasized as a fundamental concept in our lives. It is underscored that sustainability is not merely a contemporary trend, but rather a set of ethics that should be deeply rooted in our actions and awareness, especially when it comes to alleviating the burden on the environment and our responsibility towards future generations. (Al-Nabhaniya, 2020)

The "Green Library" movement exemplifies the integration of sustainability and environmental consciousness into various aspects of life, including library engineering, design, management, and services. Meeting customer requirements is crucial, and marketing strategies to establish a "green" image are essential for environmental initiatives. The shift towards sustainability positively influences societies and institutions, encouraging practices for environmental preservation and development.

10.2. Ecological Sustainability as a Marketing Tool in Public Libraries

Marketing first appeared in LIS literature in the early 1970s (Gupta, 2006, p. 13), around the same time as the "library's role in environmental education" (Armstrong, 1971). Although "green marketing" today leads to hints of a "green" library image as a marketing tool or strategies for marketing a "green" library, these cannot be described or discussed in survey literature (Scherer, 2013, p. 20). Most people believe that green marketing only refers to promoting environmentally friendly products or advertising their features. However, "greening" the library does not just refer to "products," but also to services from an administrative perspective. One might say that "greenwashing" is a common marketing and promotional strategy for services and products as being environmentally friendly, being merely a trendy sign, while in reality, there is no real impact on the environmental footprint of the seller or the customer. However, this should not prevent libraries from taking a clear stance (Sahavirta, 2013) on green thinking and green practices through their buildings, management, and services. Practicing and demonstrating "sustainable thinking" worldwide showcases the library's building, equipment, management, and services as evidence that we care about customers as individuals and about our communities—both locally and globally. (Tinarat, 2013) Environmentally friendly, sustainable services are a means to create a good image and thus market to decision-makers and customers. An intelligently designed, environmentally friendly facility can be part of the library's marketing strategy to demonstrate to its community that it cares about how the allocated funds are spent with the aim of reducing costs in the future (Aldrich, 2013). To create a visible green image for the library, for example, by expressing their commitment to green values by disseminating knowledge and information about sustainable environments or by reducing the library's environmental footprint, they meet user desires and demands, making it a good marketing strategy. (Werner, 2013)

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The marketing concept in Library and Information Science (LIS) has evolved since the early 1970s, with a focus on environmental education. "Green marketing" has become a notable topic, promoting libraries as environmentally responsible institutions. However, the term has not received much attention in survey studies. The concept of "greening" emphasizes the importance of change beyond products, encompassing services and management. This shift towards sustainability requires fundamental changes in behavior and practices, not just superficial or symbolic ones.

Green thinking and practices are crucial for libraries to achieve sustainable development and a positive image. They should be integrated into all aspects of the library, including buildings, management, and services. A clear, leadership-oriented approach to green thinking and practices is essential, reflecting a commitment to environmental values and social responsibility.

11: Trends of Public Libraries in Algeria towards Green and Ecological Sustainability: Public Libraries Yahia Bouaziz, Mascara State, as an Example

11.1. Ecological Sustainability at Public Library Yahia Bouaziz, Mascara State: Building and Library Services towards Green Initiatives

Public libraries are increasingly adopting ecological sustainability in their marketing strategies, a shift in response to global developments and Western libraries' adoption of new concepts. The Public Library Yahia Bouaziz in Mascara, Algeria, is one of the few libraries that refuses to remain within its classical framework. Established in 2008, it gained independence through Executive Decree No. 08/236. The main library in Mascara is located in a 4453 square meter building on Doctor Issaad Mazigh Khalid Street, which includes two reading halls, an internet hall, exhibition hall, storage spaces, and administrative offices. The library also features an open-air theater with a capacity of 1,000 seats.

11.2. Analysis of the Interview Results

11.2.1 The Concept of Green Transformation and Sustainability in Public Libraries

Public libraries are transforming to adopt sustainable practices for environmental preservation and development, educating and promoting sustainable practices in the community to meet current and future generations' needs.

11.2.2 Challenges Faced by Libraries in the Green Transformation and Implementation of Sustainability Concept:

Technical and material challenges include resource availability and technology for sustainable practices, while cultural and educational challenges involve changing societal behavior and raising sustainability awareness.

11.2.3 Libraries may face technical and financial obstacles that hinder the adoption of sustainable practices. Here are some obstacles that libraries may encounter:

- **conversion costs:** Libraries may need financial investment to improve sustainability by upgrading infrastructure, implementing energy and waste management systems, and providing environmentally friendly resources and materials.

- **Lack of financial resources:** Libraries may struggle with limited budgets, requiring investments in sustainability awareness programs, staff training, and purchasing environmentally friendly resources and materials.
- **Libraries may need to invest in new technologies to promote sustainable practices, such as energy and waste management systems and improved automation. Staff training and development are also necessary for improved sustainability awareness and skills.**
- **Lack of awareness and understanding:** Libraries face challenges in promoting sustainability awareness among staff and users due to a lack of understanding. To overcome these obstacles, libraries should organize educational workshops, provide resources, and develop innovative financial strategies. Collaborating with donors and local partners can also help secure necessary funding and technical support.

In summary, The library faces technical and financial barriers to adopting sustainable practices, but with collaboration and effort, these obstacles can be overcome and lead to a green transformation.

11.2.4 Available Sustainable Initiatives and Actions

- Public libraries can implement sustainable initiatives like efficient waste management, renewable energy use, and community recycling to promote sustainability. Specific actions can be taken to achieve the transition towards green practices and implement the concept of sustainability in the library. For example :
 - **Waste management,** the library can implement effective waste sorting and recycling policies and encourage users to cooperate by providing designated containers for proper disposal of recyclable materials.
 - **Energy Efficiency:** The library can take measures to reduce energy consumption, such as using high-efficiency LED lights, improving ventilation and cooling systems, and encouraging users to turn off electronic devices when not in use.
 - **Renewable Resources:** The library can harness renewable energy sources like solar or wind power to operate some of its devices and meet its energy needs.

11.2.5 Awareness and Training

- **Methods for Raising Awareness among Library Staff and Users About the Importance of Sustainability in the Library.**
- These training courses can include emphasizing the significance of sustainability and providing practical tips on how to incorporate sustainable practices into daily life.
- Yes, the library can offer training courses and workshops on sustainable practices and the green transition, emphasizing their importance and providing practical advice for daily life application.

11.2.6 Evaluation and Monitoring:

The library should assess its sustainability performance by evaluating its impact on the community and using sustainable performance indicators to evaluate progress and improve long-term practices.

11.2.7 Collaboration and Partnerships:

- The library can foster sustainable practices by forming partnerships with various institutions, including local governments, environmental associations, academics, and private companies, to exchange knowledge and implement joint projects.
- External entities may provide financial or knowledge support to the library in implementing sustainable initiatives. There are several sources of support that the library can collaborate with, including:
 - The library can secure financial assistance from local government entities, such as municipalities or cultural bodies, through sustainable initiatives or programs.
 - Charitable and civil society organizations: The library can seek financial or knowledge support from various charitable and civil society organizations focusing on sustainability and the environment for its sustainable initiatives.
 - **Private Companies:** Private companies are promoting sustainability by partnering with local communities and sponsoring social and environmental initiatives, providing financial support to support these efforts.
 - Research and Academic Institutions :Research and academic institutions can significantly contribute to the implementation of sustainable initiatives in libraries by providing knowledge, research assistance, and expertise in sustainability and environmental practices.

The library plans to revamp its policies and procedures to comply with sustainability principles and the green transition, focusing on waste management, energy consumption, and resource protection.

11.2.8.Future Plans

The future plans for the library to enhance the transition towards green practices and achieve sustainable development are based on the library's vision and strategic objectives. These plans may include the following:

- Developing sustainable policies and procedures: The library will work on updating and developing its policies and procedures to align with sustainability principles and the green transition. This may involve setting specific goals in areas such as waste management, energy consumption, and the protection of natural resources.
- Enhancing awareness and education: The library plans to conduct awareness campaigns and events to promote sustainability and community participation, including workshops, lectures, and informative presentations.
- Strengthening collaboration and partnerships: The library plans to collaborate with donors, local institutions, and the community to achieve sustainable development through joint project implementation, knowledge exchange, and financial support.
- Investing in technology: The library plans to implement sustainable practices through technology, including energy and waste management systems, digital materials, and remote learning to reduce paper consumption and carbon emissions.

- Expanding sustainable initiatives: The library plans to enhance its sustainability initiatives by offering recycling services and promoting environmentally friendly materials, as well as organizing events and programs for the public.
- Monitoring and evaluating performance: The library plans to continuously assess its performance in sustainability and the green transition, potentially using specific evaluation mechanisms and indicators to gauge progress and identify areas for improvement.
- Continuous learning and development: The library plans to enhance staff's sustainability and green transition skills through continuous learning and development through training courses and workshops.

The library aims to serve as a sustainable role model and actively contribute to local and community development through consistent development and implementation of future plans.

11.2.10 There are future strategies and projects aimed at developing sustainable practices in the library. Some of these strategies may include:

- Developing new policies and guidelines: The library plans to create new policies promoting sustainability and the green transition, focusing on sustainable materials, recycling, energy and water conservation, and promoting digital services.
- Adopting green technology: The library plans to invest in green technology and smart solutions, such as smart building management systems and mobile applications, to enhance energy efficiency and public access.
- The library plans to collaborate with local governments, environmental institutions, and NGOs to promote sustainable practices through knowledge exchange and awareness events. It will also invest in sustainability research and innovation to reduce environmental impact and enhance library efficiency.
- Staff training and awareness: The library is implementing staff training programs to promote sustainable practices, including waste separation, recycling, digital resource usage, and energy and water consumption efficiency.
- Public engagement: The library can promote sustainability through continuous communication, raising public awareness through various channels, and organizing events and activities to encourage participation in sustainable initiatives.

The library is implementing green practices to promote sustainable development. This includes adopting sustainable policies, embracing green technology, fostering community partnerships, investing in research, raising staff awareness, and engaging with the public. Regular assessments and reports are being conducted to evaluate the impact of library activities on the environment and potential risks.

11.2.11 Environmental Risk Assessment

Yahia Bouaziz Library in Mascara.

The library can assess potential environmental risks from its activities, identifying and evaluating their impact on the environment and the surrounding community. The measures taken to deal with and mitigate these risks include:

- risk identification: potential environmental risks arising from library activities, such as high energy consumption, waste production, use of hazardous materials, and others, are identified.
- Risk evaluation: The potential risks' impact on the environment and the community is assessed, including the probability of their occurrence and negative effects.
- Precautionary measures: preventive measures are implemented to mitigate environmental risks, such as using energy-efficient technologies, implementing waste management programs, and adopting environmentally friendly practices in material and resource usage.
- Compliance with laws and regulations: The library must adhere to local and national environmental laws and regulations and ensure compliance with the required environmental standards.
- Employees receive training on environmental risks and mitigation measures, promoting active participation in sustainability efforts. Results and impacts of these measures are monitored and evaluated for improvement.
- The effectiveness of these measures is assessed, and any improvements or modifications needed to enhance the library's environmental performance are identified.

The library assesses potential environmental risks and implements measures to mitigate them, such as adopting environmental technology, following laws and regulations, and providing employee training to preserve the environment and achieve sustainability in its activities.

11.2.12 Incentives and Encouragement

The library promotes sustainable practices through reduced subscription fees, special rewards, public participation, and suggestions for environmental conservation.

The library can employ various methods to gather public opinions and suggestions, including:

- opinion surveys: The library can conduct surveys or polls to gather public opinions on sustainability-related issues, including desired sustainable programs or services.
- Direct communication: The library can facilitate public engagement through interactive events like workshops, seminars, or public meetings, promoting active participation and information about the transition towards sustainability.
- Suggestion box: The library can create a suggestion box for public input on sustainable practices, encouraging active participation and regular evaluation. These suggestions, if aligned with the library's sustainability vision, can be adopted as part of the strategy, fostering positive interactions with the public and achieving a more effective transition towards sustainable practices.

11.2.13 Incentives and Motivation

The library may provide incentives and motivations for the public to engage in sustainable practices during their library visits. These incentives may include:

- **green transportation programs:** The library can promote sustainable transportation by offering bike racks and bus stops, and incentives like fee discounts or services to encourage public use.
- **Awareness promotion:** The library organizes various programs and events to raise public awareness about sustainability, including lectures, workshops, and informative presentations, promoting environmental and sustainability initiatives.
- **Sustainability rewards:** The library may provide incentives like fee reductions or gift cards to encourage sustainable practices among its visitors, thereby raising awareness and encouraging active participation in its initiatives.

11.2.14 The library may organize programs and events aimed at raising public awareness about the importance of sustainability and encouraging participation in sustainable initiatives.

Here are some examples of these programs and events:

- workshops and educational lectures: The library hosts workshops and educational lectures on sustainability-related topics, aiming to raise public awareness about recycling, energy conservation, healthy nutrition, sustainable agriculture, and environmental conservation techniques.
- Awareness exhibitions and displays: The library hosts informative exhibitions and displays showcasing sustainable practices across various fields, highlighting environmental, social, and economic challenges and promoting individual contributions to achieving sustainability.
- Awareness campaigns through communication channels: The library uses various communication channels like website, social media, and newsletters to promote sustainability and provide public tips for participating in sustainable initiatives.
- Interactive events: The library plans to host interactive events, including workshops and creative activities, to promote public participation in sustainable initiatives, encouraging practical actions to preserve the environment and community.

The library is implementing various activities to promote sustainability, including workshops, discussions, and creative competitions, aiming to engage the public in learning about and participating in green transformation.

11.2.15 Supervision and Monitoring:

- The study sample stated that sustainable practices in the library should be regularly monitored and evaluated.
- A specialized team can oversee sustainable policies, assess outcomes, and provide guidance. The library should establish strategic plans for green practices, improving energy efficiency, utilizing renewable resources, and providing staff training.

11.2.16 Advice and Recommendations Based on the experience and knowledge of the study sample, some advice is given to other public libraries wishing to transition to green practices and enhance sustainability:

- Comprehensive assessment of current practices: The library should conduct a comprehensive evaluation of its current operations to identify areas for improvement and strengths.
- Allocation of financial and human resources: The library should allocate a specific budget for sustainability initiatives and provide staff with support and training to improve their awareness and knowledge of sustainable practices.
- Innovation and development: The library should foster sustainability innovation by utilizing modern technologies like artificial intelligence, optical analysis, virtual reality, and augmented reality. This can lead to the development of sustainable digital content, equal access to environmental information, and digital tools for public participation.
- Continuous assessment and improvement: The public library should continuously evaluate its sustainability performance and implement sustainable assessment and review systems to track progress and identify areas for improvement and development.

11.2.17 Recommendations for the Local Community and Donor Agencies to Support Libraries in Achieving Sustainable Development:

- Building Partnerships: Partner with institutions, local communities, and donor agencies to enhance knowledge and expertise in green transformation, providing resources for sustainable goals.
- Providing awareness and training: The organization plans to conduct training courses and workshops on sustainability, focusing on topics like waste management, energy conservation, and renewable resource use.

11.2.18 Performance Measurement and Evaluation:

- The library should implement performance measurement tools and sustainable performance indicators to assess its progress in green transformation.
- Tools and indicators can establish standards and measure progress in sustainable practices, such as recycling, energy efficiency, renewable resource use, carbon emissions reduction, and sustainable resource proportion in library collections.

11.2.19 Communication and Awareness:

The library should promote sustainability through continuous communication with the public and local community, raising awareness about its green transformation efforts and fostering a sustainability culture. There are several methods that can be used to achieve this, including :

- The library can offer educational programs on sustainable practices, such as workshops and lectures, to educate users and the community about their benefits. Additionally, they can create exhibitions and awareness displays promoting environmental concepts and green transformation.
- Awareness materials: The library can effectively promote sustainability and environmental awareness by offering a variety of awareness materials, including books, magazines, and newsletters, to its audience.
- Social media: Social media platforms like Facebook, Twitter, and Instagram can be utilized to promote the library's sustainability efforts, share environmental information, and invite public engagement.
- Local partnerships: The library can foster collaboration with local partners, such as environmental institutions and NGOs, to organize joint events, exchange knowledge, and promote public awareness about sustainability.

The library should develop a strategic plan, identify its target audience, design programs, and use innovative communication methods to promote environmental awareness and sustainability.

11.2.20 The Library utilizes various communication channels, including websites, social media, and community events, to promote awareness campaigns and encourage public participation in sustainable initiatives.

11.2.21 Community Engagement:

- The library promotes community involvement in sustainable initiatives, working closely with members and organizations to achieve broader sustainable development.
- The library fosters partnerships with local communities, collaborating with government institutions, NGOs, businesses, and environmental groups to exchange knowledge, expertise, and resources for sustainable development.

The library can collaborate with local communities to promote sustainable practices, such as environmental awareness programs, sustainable gardens, recycling, and waste reduction, thereby enhancing the community's overall development.

11.2.22 Supervision and Monitoring:

- To monitor and measure the implementation of sustainable practices in the library, a set of mechanisms and tools can be adopted:
 - **The library employs sustainable performance indicators to monitor energy consumption, waste generation, and renewable resource use, regularly collecting and analyzing data to identify improvement areas, and regularly reports outlining implementation and evaluation of sustainable practices.**
 - **External consultation and review:** External sustainability experts can assist the library in assessing current practices, identifying improvement opportunities, and developing action plans for a green transformation.
 - The library monitors and evaluates sustainable practices based on public and user feedback. Observations and ideas from visitors and members are gathered and evaluated to determine satisfaction levels and areas for enhancement.

The library's sustainability management team monitors and evaluates green transformation, enhancing processes, staff training, and community communication to ensure continuity and innovation.

11.3 General Results

In general, Public libraries should promote sustainability, foster innovation, and collaborate with local communities, raising public awareness and encouraging active participation for a sustainable future.

- **Promoting a Green Culture in Society:** Public libraries can promote sustainability by offering resources, information, workshops, and educational events to encourage daily sustainability practices and environmental living among users and the local community.
- **Implementing Environmental Initiatives:** The library can enhance its environmental impact through effective waste management, energy efficiency, and sustainable design principles in its operations and renovations.

The public library plays a crucial role in promoting sustainability and environmental preservation by offering resources, educational materials, workshops, and policies. It should address technological, financial, and educational challenges, develop sustainable policies, provide training, collaborate with local partners, invest in eco-friendly infrastructure, and encourage community participation in sustainability efforts.

11.4 Results Based on Hypotheses

1.The first hypothesis is confirmed: Transforming the public library under study into a green library can have a positive impact on enhancing the library's reputation and increasing the number of beneficiaries. This can be achieved by establishing concrete policies and programs aimed at

integrating environmental sustainability concepts into various aspects of the library's operations, including enhancing the environmental design of buildings.

2. The second hypothesis is confirmed: The services and programs of the library under study can contribute to promoting environmental awareness and encouraging sustainable development, thereby making the library a significant focal point in the community. By providing informative and educational resources and programs, the library may enhance awareness and community participation in sustainability issues, thereby reinforcing its role as a primary reference and platform for discussions and related activities.

3. The third hypothesis is approximately confirmed: Collaborating with local partners and relevant institutions is likely to enhance the library's ability to achieve the green transformation and sustainable development. Knowledge exchange, expertise sharing, and joint project implementation with interested parties can contribute to enhancing the library's efforts and expanding its impact on the community. The library under study aims to achieve this comprehensively, not just relatively.

12. Suggestions

Algerian public libraries should prioritize eco-friendly design to reduce environmental impact, increase awareness, and enhance marketing appeal, meeting the growing expectations of the new generation.

- The ministry should improve indoor air quality, use health-friendly materials, and reduce health risks to enhance work efficiency, while reviewing public library budgets and allowing directors freedom in decision-making.
- Understand and coordinate the work of the cultural sector as a whole to create a unified output.
- Utilize modern technology to enhance public library services, ensuring continuous improvement to meet citizens' needs and create strategies to attract readers.
- Partner with other institutions, encourage green library projects, and adopt environmental standards in green library practices. Consider harmony and green design in indoor and outdoor spaces. Users should be able to access information in smart buildings equipped with high-tech technology.
- **Develop environmental infrastructure:** Libraries can enhance their environmental sustainability by implementing renewable energy sources, improving waste management systems, and offering environmentally friendly facilities.

- Libraries should organize awareness campaigns on environmental issues and promote sustainable development, while providing diverse resources and guidance to enhance accessibility and support green practices.
- Libraries should form partnerships with local institutions and associations to promote sustainable development. They should also develop educational programs and events to raise awareness about environmental issues, such as waste sorting and recycling.
- Libraries should foster community participation in environmental projects and initiatives through volunteer work teams and events, and regularly evaluate their progress to ensure continuous growth and effectiveness.

13. Conclusion

Green elements in public libraries in Algeria can boost their reputation and attract environmentally conscious visitors. Yahya Bouaziz Library in Mascara is a pioneer in green marketing, promoting environmental awareness and education. Challenges include financial constraints, employee resistance, and resistance to change. Best practices include sustainability audits, setting goals, and creating action plans. Future green marketing involves technology integration, renewable energy solutions, and sustainable patron collaboration.

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