The Attractive Determinants of Green Technologies: The Case of The Health Sector in Morocco

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Abstract: The Green Tech movement appeared fairly recently, in 2014 with the Clean Tech Group in the United States. Today and more than ever, this new discipline has a dominant place on an international scale due to the many issues related to the ecological transition in the various sectors of the economy. The health sector is taking a real place in the implementation of both technological and responsible practices, but its nature of endorsing this performance generates other factors that can be as strong and relevant implicit determinants.

To this end, the research problem is as follows: what are the attractive determinants of green-technology in the Moroccan health sector?

Based on the literature review, the working methodology focuses on a mixed approach, a first qualitative (exploratory) and a second quantitative (confirmatory). The first is aimed at professionals through the interview guide which was addressed to the managers of three private clinics (20 managers). The confirmatory approach is based on a questionnaire answered by the patients of the private clinics mentioned in the qualitative study (60 responses). From the use of several explanatory variables presenting the attractive determinants of green-technology, it was deduced that the most significant variables of the literature review are those that posit the acceptance of green technology (UTAUT model) as a multifactorial dimension of explanation of green- technology. The results of this research show through a principal component analysis (structural equations) that the variables qualified as determinants of the attractiveness of green technology are: eco-design and eco-consumption, so the acceptance of green technology is practically achievable with the level of education and years of experience.

Keywords: Green technology, Health sector, Eco-design, Eco-labelling, Eco-consumption.
JEL classification: G02, I22, P34.

1. INTRODUCTION

The research problem aims to identify the key determinants that make green technology attractive in the Moroccan health sector. Understanding these determinants can provide valuable insights into the factors that influence the adoption and implementation of green technology practices in healthcare facilities. By examining the specific context of Morocco, it becomes possible to address the unique challenges and opportunities associated with green technology in the country's health sector.

One of the main determinants of green technology attractiveness in the Moroccan health sector is the growing awareness of environmental issues and the need for sustainable solutions. As global concern about climate change and environmental degradation increases, individuals and organizations are becoming more conscious of their impact on the environment. This awareness extends to the healthcare sector, where the implementation of green technology aligns with the broader goal of environmental preservation (Lockett, A., & Wu, Z, 2013).

Another determinant is the potential for cost savings and efficiency improvements. Green technologies often offer long-term economic benefits by reducing energy consumption and operating costs. In the context of the Moroccan health sector, where resources may be limited, adopting green technology can provide a viable solution to reduce expenses while maintaining high-quality healthcare services.

Furthermore, government initiatives and policies play a crucial role in promoting the attractiveness of green technology in the health sector. Governments can provide incentives, subsidies, or tax benefits to healthcare facilities that adopt green technology practices. These supportive measures encourage healthcare providers to invest in environmentally

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friendly solutions and contribute to sustainable development goals.

Collaboration and partnerships between different stakeholders are also essential determinants of green technology attractiveness in the Moroccan health sector. Engaging with technology providers, research institutions, and other healthcare facilities allows for the exchange of knowledge and best practices, fostering innovation and the development of effective green technology solutions.

Additionally, the availability of skilled workforce and technical expertise is vital. Having trained professionals who understand the principles and applications of green technology ensures its successful implementation and operation in healthcare settings. Education and training programs that focus on green technology in healthcare can further enhance its attractiveness and facilitate its adoption. Claver-Cortés, E., Llopis-Montiel, O., & González-Sánchez, M, 2012).

Lastly, public perception and trust in green technology also influence its attractiveness in the Moroccan health sector. Patients and the wider community often value environmentally responsible practices and may prefer healthcare providers who prioritize sustainability. Building trust and showcasing the positive impacts of green technology on health and the environment can create a favorable perception and increase its desirability.

By investigating and analyzing these determinants, researchers can gain valuable insights into the factors that drive the attractiveness of green technology in the Moroccan health sector. The findings can inform policymakers, healthcare organizations, and technology providers on strategies to promote and facilitate the adoption of sustainable practices, ultimately leading to a greener and healthier future for Morocco.

In addition, green technology can also help reduce medical waste by using recyclable materials and implementing effective waste management practices. Finally, green technology companies can also develop advanced technologies to help prevent and to treat environmental diseases, such as asthma or diseases related to air and water pollution.

To this end, the research problem is as follows: what are the attractive determinants of green technology in the Moroccan health sector?

2. LITERATURE REVIEW

The literature review is a crucial step in academic and scientific research. It makes it possible to situate the research problem in the existing theoretical and empirical context, to synthesize the knowledge acquired on the subject, to identify gaps and discrepancies in the literature, and finally to formulate the objectives and hypotheses of the research. It thus guarantees the relevance and rigor of the results, while avoiding the duplication of work already carried out and providing a solid basis for discussion and recommendations. The literature review is therefore an essential step in conducting quality research and contributing to the advancement of knowledge in the field of research.

2.1. Green Technology: Background and Conceptual Framework

The history of green technology goes back decades. The first initiatives concerning the management of natural resources emerged in the 1960s and 1970s, following an awareness of the need to preserve the environment and limit the negative effects of human activities on the planet.(Rezaei, R.,ellucci, M, 2018).

In the 1980s, sustainable development became a major theme for governments and businesses, leading to the establishment of environmental policies and regulations to limit pollution and the consumption of natural resources. However, this is only 'from the 1990s that the concept of green technology began to develop. Green technology, also known as "clean technology" or "environmental technology", refers to the use of resource-efficient and environmentally friendly technologies to produce energy, goods and services.Technology green focuses on reducing greenhouse gas emissions, waste management, biodiversity protection, water management, renewable energy and the fight against air and water pollution. It aims to reduce the environmental impact of human activities while enabling sustainable economic growth. (Graham-Rowe, E., Jessop, DC, & Sparks, P, 2014). The conceptual framework of green technology is based on three key principles: environmental sustainability, economic viability and social responsibility. These principles aim to integrate environmental considerations into production and consumption processes, while ensuring the economic viability of companies and respecting the social rights of all actors involved. It aims to reduce the environmental impact of human activities while enabling sustainable economic growth. The conceptual framework of green technology is based on three key principles: environmental sustainability, economic viability and social responsibility. These principles aim to integrate environmental considerations into production and consumption processes, while ensuring the economic viability of companies and respecting the social rights of all actors involved. It aims to reduce the environmental impact of human activities while enabling sustainable economic growth. The conceptual framework of green technology is based on three key principles: environmental sustainability, economic viability and social responsibility. These principles aim to integrate environmental considerations into production and consumption processes, while ensuring the economic viability of companies and respecting the social rights of all actors involved (Dobre, I., Didraga, O., & Pop, CA, 2016).

Unlike other environmental approaches that focus solely on managing waste and reducing emissions, green technology also focuses on designing more sustainable products and services, promoting sustainable lifestyles, and creating green jobs.

Table 1. Different Definitions of Green Technology.

Theorists	Definition of green technology
Wangari Maathai (2004)	Green technology is an innovative approach that uses natural resources more efficiently and sustainably while minimizing environmental impact.
Thomas	Green technology incorporates the concepts of environ-

Friedman (2008)	mental sustainability, conservation of natural resources and reduction of greenhouse gas emissions.
Mark Jacob-son (2011)	Green technology includes any technology, product or service that reduces environmental impact and improves resource efficiency.
Jeremy Rifkin (2011)	Green technology focuses on using renewable energy sources and clean technologies to help reduce pollution and greenhouse gas emissions.
Jeffrey Sachs (2012)	Green technology is focused on designing products and services that have a positive impact on the environment, while improving performance and profitability.
Jim Yong Kim (2014)	Green technology is a holistic approach that encourages smarter use of energy and raw materials, optimization of production processes and waste management.
Naomi Klein (2014)	Green technology encompasses all technologies that support the transition to a greener and more sustainable economy, including solar, wind, hydro or geothermal energy, electric mobility, biotechnologies, etc.
Christiana Figueres (2015)	Green technology is an approach that focuses on reducing negative environmental impacts and promoting positive environmental impacts.
Mark Carney (2019)	Green technology involves close collaboration between the public and private sectors to encourage investment in more sustainable and environmentally friendly technologies.
Greta Thun-berg (2019)	Green technology is an approach that aims to create a more sustainable and resilient economy by designing products and services that take into account the environment, society and the economy.

Source: author illustration.

2.2. The Health Sector in Morocco and the Use of Green Technology

In Morocco, the health sector has embarked on a transition towards increased use of green technology in order to reduce its environmental impact. This transition is driven by the country's commitment to achieving the United Nations Sustainable Development Goals, as well as the need to rationalize energy costs and reduce greenhouse gas emissions (Boubakri, A., El Ghoul, S., Guedhami, O., & Kwok.C, 2019).

In this context, several initiatives have been launched to integrate green technologies into the health sector in Morocco. For example, hospitals have started installing solar energy systems to meet part of their energy needs. Others have implemented waste management programs to minimize their impact on the environment (Rezaei, R., & Bellucci, M,2018)

In addition, green technologies are also used to improve the quality of health care in Morocco. Hospitals use air quality monitoring systems to ensure a healthy atmosphere for patients and staff. Energy-efficient medical equipment is also used to reduce energy consumption and costs. However, despite the initiatives underway, there is still much to be done to achieve the full transition to increased use of green technology in the health sector in Morocco. Additional investments and awareness programs are needed to encourage hospitals and healthcare professionals to adopt more environmentally friendly practices (Boudhar, A., & Li, Y,2018).

2.3. The Attractive Determinants of Green Technology

The determinants of green technology or "green tech" are many and varied. The most important factors influencing the development and adoption of these technologies show up in six variables:

1. Government regulations: governments have a crucial role to play in encouraging investment in green technologies. Tax incentives and grants can stimulate innovation and research in the field. They can also impose constraints on industries that do not comply with environmental standards. For example, companies must comply with air and water pollution laws. Additionally, green purchasing programs can encourage companies to source environmentally responsible products and services.

2. Production costs: the production costs of green technologies must be competitive with existing products and technologies. Technological advances and economies of scale can help reduce costs and encourage the adoption of these technologies.

3. Consumer awareness: consumers, who are increasingly sensitive to environmental issues, are likely to be influenced by their ecological conscience to buy clean products and technologies.

4. Public-private partnerships: Collaboration between private companies and governments can help catalyze the adoption of green technologies by offering government guarantees or marketing agreements to reduce business risks.

5. Financial arrangements: significant financial arrangements may be necessary to finance the development of these technologies. Investors are looking for technologies that offer the potential for sustainable and profitable growth.

6. Company missions aimed at reducing environmental impacts:all companies seek to comply with local and international environmental standards, reduce their energy bills and reduce their carbon footprint (Rachel Carson (1962).

These factors may vary according to the country, the sectors of activity or the technologies considered, but they remain globally relevant for the development of green technology.

2.4. Eco-design and Green Technology

Eco-design is a design approach aimed at assessing the environmental impact of products and services over their entire life cycle. The raw materials used, the production, distribution, use and end of life of the product are all taken into account to minimize their negative impact on the environment (Al-Mulla, FM, & Abdel-Malek, L, 2015).

In a context of ecological protection, eco-design is an essential tool for reducing the environmental impact of products and services. It makes it possible to create sustainable, reusable and recyclable products, thus reducing the amount of waste produced by their consumption. In addition, eco-design also has a positive impact on the consumption of water, energy and raw materials. , while improving the quality of life of consumers and preserving the health and well-being of living beings and the environment.

Technology can play a big role in eco-design by providing modeling and simulation tools to assess the environmental impact of products, materials and manufacturing processes. These tools can help designers optimize product design by minimizing environmental impacts, while maintaining the functional and aesthetic characteristics of the product. Enright, MJ, & Newton, SK (2010).

Additionally, the technology can be used to improve the energy efficiency of products and manufacturing processes, which can significantly reduce the carbon footprint and production costs. Finally, technology can also help make products more sustainable, by using recyclable materials and promoting the reuse and recycling of end-of-life products. (Chauhan, A., & Singh, M, 2019).

2.5. Eco-consumption: an Important Determinant of Green Technology

Eco-consumption is a concept that refers to the behavior of consumers who seek to minimize their environmental impact by choosing products and services that respect the environment. This trend is part of a broader movement of responsible consumption, which emphasizes the importance of taking into account ecological and social issues in our consumption choices (Mkik, M., Mkik, S,2023).

In the field of green technology, eco-consumption is an important determinant of the adoption of environmentally friendly solutions. Indeed, many consumers are willing to invest in cleaner technologies to reduce their carbon footprint and conserve natural resources.

Thus, manufacturers of green technologies must take into account consumer expectations in terms of sustainability and environmental impact in the design of their products. Companies that offer cleaner technologies can also set themselves apart from the competition by showcasing their commitment to sustainability, which can help them gain market share and customer loyalty.

In short, eco-consumption is a key factor in the transition to a more sustainable and environmentally friendly economy. By choosing cleaner technologies and favoring companies committed to sustainability, consumers can help build a greener and more responsible future (Cottrill, C., Cassell, C., & Symon, G,2013).

2.6. The Stimulation of Green Performance Through the Concept of Eco-efficiency

Eco-efficiency is an approach that aims to optimize the use of natural resources and reduce environmental impacts while increasing the economic performance of companies. It consists of maximizing the efficiency of the use of resources by reducing the consumption of energy and raw materials, the production of waste and the emission of pollutants. The concept of eco- efficiency encourages companies to take into account the entire life cycle of their products and services, assessing the environmental impact of the production, distribution, use and end of life of the products. This reduces environmental impacts, optimizes costs and improves economic performance (Dove, R, 2015).

Businesses can drive green performance by adopting an eco-efficiency approach to their management of resources and the environment. This approach may include the implementation of energy efficiency programs, the reduction of greenhouse gas emissions, the sustainable management of water resources, the promotion of the use of renewable raw materials, the reduction of waste and the establishment of sustainable business practices (Nistor, RG, & Mustafaraj, E, 2019).

Embracing eco-efficiency can also provide competitive advantages to companies by showcasing their environmental initiatives to customers, investors and business partners. It can also strengthen the company's social responsibility towards the community and the environment, create green jobs and contribute to sustainable development (Ayadi, H., & Kadri, I, 2019).

In summary, boosting green performance through the eco-efficiency approach can deliver lasting economic, environmental and social benefits to businesses and society as a whole.

2.7. Labeling: an Important Determinant in the Performance of Green Technology

Labeling is an important factor in the performance of green technology because it demonstrates the quality of products and services related to the environment. Labels are certificates that guarantee the compliance of a product with environmental standards. Organizations that obtain these labels are often considered to be leaders in their field, which helps them to better position their products in the market. The labeling also allows companies to differentiate themselves from the competition by demonstrating their commitment to the environment. . Consumers are becoming increasingly concerned about the environmental impact of the products they buy, which is helping to drive demand for environmentally friendly products (El Ghoul, S., ,Boubakri, Kwok, CC, A., Guedhami, O, 2019).

In addition, labeling allows companies to demonstrate compliance with environmental regulations, which can reduce the risk of lawsuits related to non-compliance. Certified organizations can also benefit from tax advantages and financial aid, which can help improve their profitability.

Basically, labeling is an important determinant in the performance of green technology because it makes it possible to demonstrate the quality of products and services related to the environment, to differentiate themselves from the competition, to meet consumer expectations and to comply to environmental regulations.

2.8. The Degree of Learning

The degree of learning depends on an individual's ability to understand and assimilate the information presented to them. Green technology refers to tools, processes and systems that are designed to preserve or restore the environment. By combining these two concepts, we can see how green technology can help support our learning.

For example, the use of green technologies such as solar energy, rainwater harvesting and waste management can help reduce our impact on the environment, which is crucial for future generations. Additionally, these technological innovations can help facilitate learning about environmental issues by providing a tangible and accessible context for students.

In sum, the degree of learning and green technology can be closely linked because green technology can provide the necessary infrastructure for environmental education and engagement (Martínez-Ros, E., Kunc, M., & Afsarmanesh, H. (2019).

2.9. Acceptance of Green Technology (UTAUT Model)

The acceptance of green technology can be explained through the UTAUT model (Unified Theory of Acceptance and Use of Technology). According to this model, the acceptance and use of technology depends on four main factors: expected performance, perceived effort, social influence and facilitating conditions.

Expected performance refers to the technology's perceived effectiveness in performing the desired task, while perceived effort refers to the time, energy, and resources required to use the technology. Social influence refers to the influence of peers and opinions of those who have already used the technology, while enabling conditions refer to the resources available to facilitate the use of the technology (Cai, Y., & Li, Y, 2017).

In the case of green technology, the expected performance is related to the positive environmental impact that this technology can have, while the perceived effort is related to the ease of use and implementation of this technology. Social influence can play an important role in the decision to adopt green technology, as the attitudes of peers and opinion leaders can impact the perception of the technology. Finally, enabling conditions, such as financial incentives and favorable government policies, can encourage the adoption of green technology (Petit, V., & Czerny, A, 2015).

According to this research model, acceptance of green technology depends on expected performance, perceived effort, social influence and facilitating conditions. Governments and businesses can therefore encourage the adoption of green technology by putting in place favorable policies and measures, by educating citizens about the environmental and economic benefits of the technology, and by promoting social interactions to positively influence the attitudes and beliefs (Butler, MP, & Howlett, M, 2012).

The UTAUT model (Unified Theory of Acceptance and Use of Technology) is a theoretical model that aims to explain the factors that influence the adoption and use of information and communication technologies.

The most important components of the UTAUT model are as follows:

1. Expected performance refers to the potential improvement in performance that users anticipate when utilizing a particular technology. It encompasses the user's perception of the benefits and advantages they believe they can achieve by adopting the said technology. This perception is based on the user's understanding of the technology's capabilities, features, and its potential impact on their tasks or activities.

When assessing expected performance, users consider various factors such as speed, efficiency, reliability, and effectiveness. They gauge how the technology can enhance their productivity, streamline processes, automate tasks, or provide better outcomes. The perceived performance gain acts as a motivating factor for users to adopt the technology and invest their time, effort, or resources into its implementation.

It is important for technology providers to communicate and align the expected performance with the actual capabilities of the technology. By ensuring transparency and setting realistic expectations, providers can build trust and credibility with their users. Demonstrating the potential benefits and illustrating real-world use cases can help users make informed decisions and fully leverage the technology's capabilities.

Furthermore, it is crucial to highlight the unique features and advantages of the technology to differentiate it from competing solutions. By emphasizing how the technology addresses specific pain points or fulfills particular user needs, providers can strengthen the user's perception of its expected performance.

2. Perceived effort refers to the user's subjective evaluation of the level of effort they believe will be necessary to effectively use a particular technology. It encompasses their perception of the time, energy, cognitive load, and overall difficulty associated with adopting and integrating the technology into their workflow or daily activities.

When users assess the perceived effort, they consider factors such as the complexity of the technology, the learning curve involved, the amount of training or support required, and the potential disruptions to their existing routines. Users also take into account their own familiarity with similar technologies or related concepts, as well as their confidence in their ability to quickly adapt to new tools or systems.

Technology providers should strive to minimize the perceived effort by designing user-friendly interfaces, providing intuitive interactions, and offering comprehensive documentation or tutorials. By reducing the complexity and making the technology more accessible, providers can help alleviate users' concerns about the effort required.

Moreover, offering clear communication about the benefits and advantages of the technology can help users understand how the potential benefits outweigh the perceived effort. Highlighting success stories or case studies of similar users who have successfully adopted the technology with minimal effort can also influence users' perceptions and reduce resistance.

3. Social influence:The user's perception of the influence of others on the adoption and use of the technology.

4. Perceived ease of use:The user's perception of the ease of use of the technology.

5. Previous experience:The user's experience of using technology.

Based on the literature review, we were able to determine the research hypotheses

Table 2. Presentation of Research Hypotheses.

Elements	Description of the hypothesis
H0	Eco-design has an effect on the acceptance of green technology
H1	Eco-consumption has an effect on the acceptance of green technology
H2	Social influence has an effect on the acceptance of green technology
H3	Previous experience has an effect on acceptance of green technology
H4	Expected performance has an effect on acceptance of green technology

Source: author illustration.

3. METHODOLOGY

Compliance with a rigorous research methodology is essential for the successful completion of any research project. Indeed, the latter makes it possible to establish the different phases necessary for the collection and analysis of data, thus guaranteeing the relevance and reliability of the results obtained. By providing a clear framework for collecting, analyzing and interpreting data, a sound research methodology also helps identify potential biases and errors in reasoning, thus ensuring a solid basis on which to make informed decisions. Thus, research methodology plays a crucial role in any scientific investigation.

3.1. Description and Characteristics of the Sample

From a methodological point of view and in order to respond to our problem, we have opted for a convenience sampling method. This is a sampling method which consists of choosing accessible or available subjects rather than resorting to to a rigorous random selection method. This approach involves the use of a sample linked to a specific sector.

In this regard, we are working on a determined sample of 40 financial, technical and technological development managers from 15 private clinics in the region of Rabat-Salekenitra and able to provide a clear answer to our problem and to make a strong interaction with the set of research items/variables.

Table 3: Goodness-of-fit indices (R^2 and Adjusted R-Square).

Type of liability	Number of People Interviewed
Financial managers	15
Technical managers	16
Technology Development Managers	9

Source: author illustration.

3.2. Factor Analysis: Structural Equation Method

Factor analysis and also the method of structural equations, commonly called SEM (Structural Equation Modeling), is used to analyze the existing relationships between observed and latent variables in a model. In the context of green technology, this statistical technique makes it possible to study the links between different concepts and indicators relating to this technology, as well as the factors that influence its adoption and use. More specifically, factor analysis and the SEM method make it possible to examine the correlations between variables and to establish causal relationships between them, taking into account direct as well as indirect effects. In concrete terms, by means of the SEM method, complex models can be built integrating all these variables, thus testing the resulting hypotheses. The models are evaluated in terms of adjustment to the data, significance of the relationships between variables and in terms of overall adequacy to the initial hypotheses.

Table 4. Presentation of the Conceptual Review of the Set of Items/Variables.

Variable	Variable Items	Coded
Eco-design	Eco-design is an approach that aims to minimize the environmental impact of products and services right from their design.	CONCEPT1
	Green technology, on the other hand, refers to technological innovations that help reduce the ecological footprint of human activities.	CONCEP2
	Green technology can also bring significant improvements at every stage of the product lifecycle, from manufacturing to end-of-life recycling.	CONCEP3
Social influence	Social networks can promote actions in favor of the environment and raise awareness of its issues	IS1
	Environmental policies can be influenced by popular pressure via social media and other technological tools	IS2
	Sharing information and disseminating knowledge via technological tools can help raise awareness among more people of the importance of eco-responsible driving.	IS3
	Advertising campaigns for green technology can impact people's consumption choices	IS4
Eco-consumption	Green technology makes eco-consumption more accessible.	CONSO1
	Both terms have in common the objective of reducing environmental impact.	CONSO2
	Eco-consumption and green technology are concrete solutions for current ecological issues.	CONSO3
	Eco-consumption and green technology can be used together for better efficiency.	CONSO4
	Green technology influences the way consumers perceive eco-consumption.	CONSO5

Previous experience	Individuals with previous environmental experience may have a better understanding of green technology	EA1
	Previous experience can help with faster adoption of green technology	EA2
	Previous negative experience with green technology may negatively affect future adoption of this technology	EA3
	Individuals with previous experience in other fields may have more difficulty understanding the benefits and opportunities of green technology.	EA4
Expected performance	Green technologies save energy while reducing environmental impact.	PA1
	They contribute to improving the energy efficiency of companies by optimizing production processes and minimizing energy losses.	PA2
	They also offer new opportunities for economic development, promoting innovation and business growth.	PA3
	Green technologies are thus a lever for the transition to a more sustainable economy, while guaranteeing better economic performance.	PA4
The acceptance of technology	Technology acceptance can foster the development of green technology as it allows for faster adoption and wider dissemination of these more environmentally friendly technologies.	AT1
	Green technology can also contribute to increasing the acceptance of technology in general by offering concrete solutions to the environmental challenges facing today's societies.	AT2
	Green technologies can also change mindsets around energy consumption and production, which could lead to changes in broader technology practices and greater acceptance of innovation.	AT3
	It is important that green technologies are efficient and affordable so that their adoption can be widespread and sustainable. Green technologies that are perceived as expensive or inefficient risk delaying acceptance of the technology in general.	AT4

Source: author illustration.

4. RESULTS AND DISCUSSIONS

Through the method of structural equations which is presented as a statistical tool increasingly used in the field of social science research. This method makes it possible to model the relationships between different variables by incorporating causal links between them. The results obtained using this method can be used to better understand the phenomena studied and to formulate research hypotheses. Structural equations also help quantify the effects of different variables on a given result.

Several studies have shown that the structural equation method can be particularly useful for examining complex relationships between variables in fields such as education, health, economics, and psychology. However, using this method requires skills in statistics and modeling that can be difficult to acquire.

Despite these limitations, the structural equation method is often considered a valuable tool for researchers seeking to understand the links between complex variables in order to better evaluate interventions and public policies.

Through this approach we try to define the process of this approach and concretize it in our study, for this we deduce the following axes:

•The initial research models.

•The ACP table of the first purification

•The bootstraps between the items/variables of the first purification

•The second purification APC table

•The bootstraps between the items/variables of the second purification

•Declaration of the final model and of the reliability and convergent validity.

The analysis of the principal components of the first purification shows that the variables most strongly correlated with the variable “Acceptance of technology” are CONCEP2 (0.906), CONSO4 (0.911) and IS2 (0.881).

This suggests that to improve technology acceptance, companies should focus on eco-design initiatives, products with low environmental impact (eco-consumption) and strong social influence.

The other variables, such as expected performance and previous experience, also have a positive correlation with technology acceptance, but to a lesser extent.

The given table represents the results of a principal component analysis conducted on the first purification process. Each row corresponds to a specific factor or variable, while the columns represent different components or dimensions derived from the analysis. The interpretation involves examining the values within the table, focusing on the scores assigned to each factor. These scores indicate the degree of association between the factors and the components. The higher the score, the stronger the relationship between the factor and the component. In this case, the table reveals the relationship between various factors, such as eco conception, eco-consumption, previous experience, social influence, expected performance, and the acceptance of technology, with the principal components derived from the analysis.

By examining the values in the table, we can analyze the association between each factor and the principal compo-

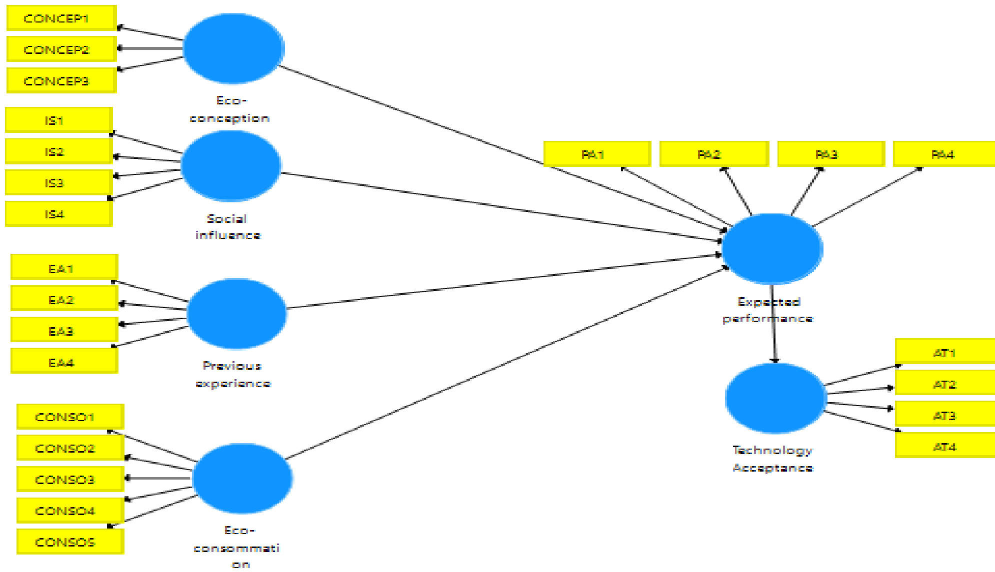


Fig. (1). Model of the first purification (Initial model).
Source: author illustration via Smart PLS.

Table 5. Principal Component Analysis of the First Purification.

	Eco conception	**Eco-Consumption**	**Previous Experience**	**Social Influence**	**Expected Performance**	**The Acceptance of Technology**
AT1						0.705
AT2						0.879
AT3						0.828
AT4						0.753
CONCEPT1	0.812					
CONCEP2	0.906					
CONCEP3	0.833					
CONSO1		0.697				
CONSO2		0.707				
CONSO3		0.825				
CONSO4		0.911				
CONSO5		0.730				
EA1			0.592			
EA2			0.824			
EA3			0.834			
EA4			0.759			
IS1				0.787		
IS2				0.881		
IS3				0.891		
IS4				0.655		
PA1					0.843	

PA2					0.792	
PA3					0.808	
PA4					0.760	

Source: author illustration.

nents derived from the analysis. The scores assigned to each factor indicate the strength of their relationship with the components. Higher scores suggest a stronger association, while lower scores suggest a weaker or no significant relationship.

Taking a closer look at the table, we can observe specific patterns and trends. For instance, factors such as CONCEP2, CONSO4, and IS2 have relatively high scores across multiple components, indicating a strong correlation with those dimensions. This suggests that these factors are critical contributors to the overall performance and acceptance of the purification process.

On the other hand, factors like AT1, AT2, and AT3 have high scores in a single component, implying a more focused impact on a specific aspect of the purification process. Similarly, factors like EA1, IS4, and PA2 have relatively lower scores across all components, suggesting a weaker association with the derived dimensions.

Overall, the principal component analysis offers a comprehensive understanding of the factors influencing the first purification process. It allows us to identify the most influential factors, their specific impact on different dimensions, and potentially guide decision-making processes for optimizing and improving the purification process. Further analysis and exploration of these relationships can provide valuable insights for researchers and practitioners in the field.

4.1. Bootstrapping of the First Purification

Bootstrapping is a statistical method used to enhance the accuracy of population parameter estimates by creating numerous random samples from an initial data sample. This technique is not directly associated with principal component analysis (PCA), which is primarily utilized to evaluate the robustness of results by identifying crucial variables for each principal component and estimating confidence intervals for individual scores.

This method involves sampling a random proportion of the total sample, applying PCA multiple times to create many sampled datasets, and estimating population parameters to ensure more accurate and reliable results, especially when the data is imperfect., incomplete or subject to high variability. By using this method, it is possible to interpret results more accurately and make more informed decisions.

The method you described is known as bootstrapped PCA (Principal Component Analysis). Bootstrapping is a resampling technique that involves drawing random samples with replacement from the original dataset. It is widely used in statistics to estimate population parameters and assess the variability and uncertainty associated with statistical estimates.

In the context of PCA, bootstrapping can be particularly useful when dealing with imperfect or incomplete data, or when the data exhibits high variability. Traditional PCA assumes that the observed data represents the true underlying population, which may not always be the case. Bootstrapped PCA addresses this limitation by creating multiple sampled datasets through resampling, allowing for a more robust and reliable estimation of population parameters.

Here's a step-by-step overview of how bootstrapped PCA works:

Random Sampling: Initially, a random proportion of the total sample is drawn from the original dataset, with replacement. This means that each data point has the possibility of being selected multiple times or not being selected at all in each sampled dataset.

PCA on Sampled Datasets: PCA is applied independently to each sampled dataset. PCA is a statistical technique used to reduce the dimensionality of a dataset while retaining the most important information. By applying PCA to multiple sampled datasets, we obtain multiple sets of principal components.

Estimation of Population Parameters: The principal components obtained from each sampled dataset are then used to estimate population parameters, such as the mean, variance, and covariance. These estimates provide a more accurate representation of the underlying population, as they take into account the variability introduced by the bootstrapping process.

Interpretation and Decision-Making: With the estimates of population parameters from the bootstrapped PCA, one can interpret the results more accurately and make more informed decisions. The variability and uncertainty associated with the estimates can be quantified through measures such as confidence intervals or standard errors, providing a clearer understanding of the reliability of the results.

The t-values indicate the number of standard deviations between the sample mean and the reference value (here, 0), divided by the sample standard deviation. The p-values indicate the probability of obtaining such a deviation or a larger deviation if the reference value were actually true in the population.

In all cases, the p-values are very small, which means that the differences between the sample mean and the reference value are not due to chance and are therefore statistically significant. This suggests that all of the variables examined are significant predictors of technology acceptance.

Table 6. Bootstrapping of the First Purification.

.	Initial Sample (O)	Sample Mean (M)	Standard deviation (STDEV)	t-value (| O/STDEV |)	p-values
AT1 <- Technology Acceptance	0.705	0.703	0.098	7,197	0.000
AT2 <- Technology Acceptance	0.879	0.875	0.039	22,416	0.000
AT3 <- Technology Acceptance	0.828	0.825	0.056	14,715	0.000
AT4 <- Technology Acceptance	0.753	0.731	0.106	7,089	0.000
CONCEP1 <- Eco-design	0.812	0.772	0.175	4,638	0.000
CONCEP2 <- Eco-design	0.906	0.862	0.213	4,252	0.000
CONCEP3 <- Eco-design	0.833	0.755	0.257	3,242	0.001
CONSO1 <- Eco-consumption	0.697	0.606	0.276	2,529	0.012
CONSO2 <- Eco-consumption	0.707	0.617	0.260	2,714	0.007
CONSO3 <- Eco-consumption	0.825	0.725	0.258	3,195	0.001
CONSO4 <- Eco-consumption	0.911	0.834	0.228	3,996	0.000
CONSO5 <- Eco-consumption	0.730	0.665	0.249	2,932	0.004
EA1 <- Previous experience	0.592	0.538	0.249	2,376	0.018
EA2 <- Previous experience	0.824	0.808	0.075	10,926	0.000
EA3 <- Previous experience	0.834	0.834	0.060	13,841	0.000
EA4 <- Previous experience	0.759	0.767	0.091	8,344	0.000
IS1 <- Social influence	0.787	0.712	0.225	3,503	0.001
IS2 <- Social influence	0.881	0.786	0.232	3,807	0.000
IS3 <- Social influence	0.891	0.716	0.261	3,410	0.001
IS4 <- Social influence	0.655	0.671	0.299	2,193	0.029
PA1 <- Expected performance	0.843	0.841	0.046	18,267	0.000
PA2 <- The expected performance	0.792	0.788	0.067	11,906	0.000
PA3 <- Expected performance	0.808	0.798	0.076	10,563	0.000
PA4 <- Expected performance	0.760	0.749	0.093	8,141	0.000

Source: author illustration via Smart PLS.

Table 7. Analysis of the Principal Components of the Second Purification.

	Eco Conception	Eco-Consumption	Previous Experience	Social Influence	Expected Performance	The Acceptance of Technology
AT1						0.705
AT2						0.878
AT3						0.828
AT4						0.753
CONCEPT1	0.812					
CONCEP2	0.906					
CONCEP3	0.833					
CONSO2		0.705				
CONSO3		0.815				

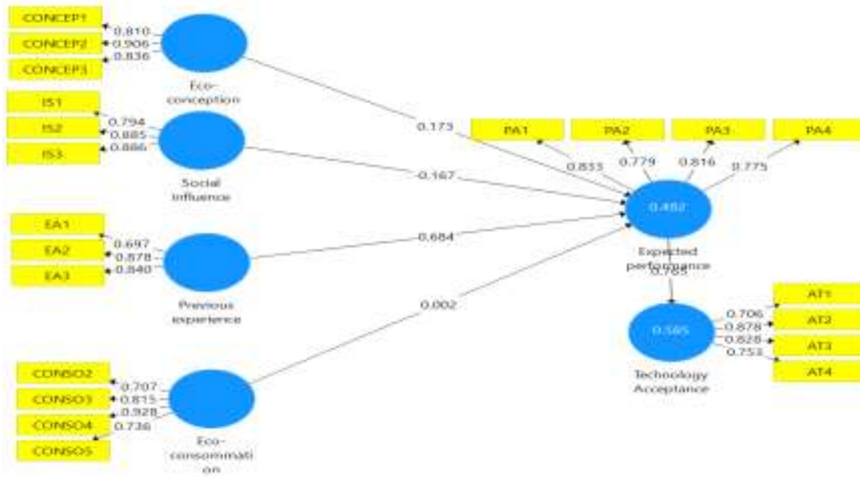
CONSO4		0.928				
CONSO5		0.738				
EA2			0.796			
EA3			0.858			
EA4			0.812			
IS1				0.791		
IS2				0.885		
IS3				0.888		
PA1					0.842	
PA2					0.792	
PA3					0.810	
PA4					0.758	

Source: author illustration via Smart PLS.

Table 8. Boot Strapping of the First Purification.

	Initial Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	t-value (| O/STDEV |)	p-values
AT1 <- Technology Acceptance	0.705	0.706	0.100	7,030	0.000
AT2 <- Technology Acceptance	0.878	0.878	0.040	21,987	0.000
AT3 <- Technology Acceptance	0.828	0.826	0.054	15,235	0.000
AT4 <- Technology Acceptance	0.753	0.740	0.101	7,459	0.000
CONCEP1 <- Eco-design	0.812	0.772	0.174	4,652	0.000
CONCEP2 <- Eco-design	0.906	0.858	0.208	4,351	0.000
CONCEP3 <- Eco-design	0.833	0.761	0.231	3,606	0.000
CONSO2 <- Eco-consumption	0.705	0.636	0.256	2,757	0.006
CONSO3 <- Eco-consumption	0.815	0.738	0.230	3,545	0.000
CONSO4 <- Eco-consumption	0.928	0.885	0.158	5,860	0.000
CONSO5 <- Eco-consumption	0.738	0.700	0.213	3,460	0.001
EA2 <- Previous experience	0.796	0.782	0.077	10,391	0.000
EA3 <- Previous experience	0.858	0.858	0.060	14,380	0.000
EA4 <- Previous experience	0.812	0.818	0.071	11,513	0.000
IS1 <- Social influence	0.791	0.733	0.258	3,071	0.002
IS2 <- Social influence	0.885	0.805	0.264	3,349	0.001
IS3 <- Social influence	0.888	0.775	0.260	3,421	0.001
PA1 <- Expected performance	0.842	0.841	0.045	18,699	0.000
PA2 <- The expected performance	0.792	0.785	0.066	11,919	0.000
PA3 <- Expected performance	0.810	0.803	0.076	10,682	0.000
PA4 <- Expected performance	0.758	0.753	0.094	8,031	0.000

Source: author illustration via Smart PLS.



Source: author illustration. via Smart-PLS.

This analysis of the principal components makes it possible to visualize the correlations between the various variables measured for the second purification. It can be observed that the variables related to eco-design and eco-consumption are strongly correlated with each other, as well as the variables related to previous experience and social influence. Expected performance is also correlated with variables related to eco-design and eco-consumption. Technology acceptance is rather independent of other measured variables.

This analysis uses Student's t-test to assess the significance of the difference between the sample mean and a theoretical value. More precisely, it uses the t-value which is obtained by dividing the deviation between the sample mean and the theoretical value by the standard deviation of the sample. The higher the t-value, the more significant the difference between the sample mean and the theoretical value.

The p-values indicate the probability of obtaining the observed t-value or a more extreme value if the theoretical value were true. If the p-value is below a certain threshold (usually 0.05), this suggests that the difference between the sample mean and the theoretical value is statistically significant. Thus, our final conceptual model looks like this:

4.1. Model Quality Criteria

The quality criteria of a model are essential to assess its relevance and reliability in solving a problem. They include the validity of the model which corresponds to its ability to reliability which guarantees stable results in different conditions and the robustness that ensures its ability to operate therefore essential to ensure the relevance of the model in these values represent the measures of the goodness of fit of the linear regression model for the two predictor variables: expected performance and technology acceptance.

Table 9. Goodness-of-fit indices (R^2 and Adjusted R-Square).

	R^2	R Square Adjusted
Expected performance	0.588	0.548
The acceptance of technology	0.581	0.572

Source: author illustration via Smart PLS.

The coefficient of determination R^2 (or R squared) measures the degree of correlation between the dependent variable (in this case, the acceptance of the technology) and the independent variable (the expected performance). An R^2 value of 0.588 for expected performance and 0.581 for technology acceptance indicates that the predictor variables have a moderate relationship with the dependent variable.

The adjusted R^2 (or adjusted R-squared) coefficient of determination takes into account the number of predictor variables in the model and helps to measure the goodness of fit while avoiding overfitting. Values of 0.548 for expected performance and 0.572 for technology acceptance indicate that these predictor variables have a moderate influence on the dependent variable after adjusting for the number of variables included in the model.

4.2. Discriminant Validity: Fornell-Larcker Criterion

In addition to the bootstrapped PCA method discussed earlier.

Another important aspect of assessing the validity of a confirmatory factor analysis (CFA) model is discriminant validity. The Fornell-Larcker criterion focuses on examining. The correlations between latent constructs in the CFA model and their corresponding indicators or observed variables. It helps determine whether the constructs are sufficiently different from each other or if there is substantial overlap, which could indicate a lack of discriminant validity

The Fornell-Larcker criterion is used to assess the convergent validity of a composite measure. This involves verifying whether the various components of the measurement are well correlated with each other and whether they indeed measure the same concept. To do this, we compare the correlation of each variable with the composite measure (bold column) to the square root of the unexplained variance of the variable (in the main diagonal). If the correlation is greater than the unexplained variance, it means that the variable measures the concept well and can be considered valid.

In the table above, it can be seen that all the variables have a significant correlation with the composite measure of consumer satisfaction (in bold). Moreover, the square root of the unexplained variance is less than the correlation for each

Table 10. Fornell-Larcker Criterion.

	Eco Conception	Eco-Consumption	Previous Experience	Social Influence	Expected Performance	The Acceptance of Technology
Eco conception	0.851					
Eco-consumption	0.561	0.801				
Previous experience	0.328	0.479	0.822			
social influence	0.447	0.600	0.293	0.856		
Expected performance	0.346	0.390	0.759	0.228	0.801	
The acceptance of technology	0.356	0.441	0.640	0.186	0.762	0.794

Source: author illustration via Smart PLS.

Table 11. Reliability and Validity of the Construct.

	Cronbach's Alpha	rho_A	Composite Reliability	Average Variance Extracted (AVE)
Eco conception	0.813	0.863	0.887	0.725
Eco-consumption	0.820	0.931	0.876	0.641
Previous experience	0.761	0.765	0.862	0.676
social influence	0.823	0.893	0.891	0.732
Expected performance	0.813	0.814	0.877	0.642
The acceptance of technology	0.802	0.813	0.871	0.630

Source: author illustration via Smart PLS.

variable, which confirms the convergent validity of the composite measure.

In conclusion, the Fornell-Larcker criterion makes it possible to evaluate the quality of the composite measurement and to ensure that all the variables indeed measure the same concept.

The given matrix represents the correlation coefficients between different factors related to technology acceptance, including eco conception, eco-consumption, previous experience, social influence, expected performance, and the acceptance of technology itself. The values in the matrix range from 0 to 1, where 1 indicates a strong positive correlation and 0 indicates no correlation. Based on the matrix, it can be observed that eco conception has a strong positive correlation with eco-consumption (0.851) and a moderate positive correlation with previous experience (0.328) and social influence (0.447). Eco-consumption also shows a strong positive correlation with previous experience (0.479) and social influence (0.600). Previous experience has a moderate positive correlation with expected performance (0.759) and a weak positive correlation with the acceptance of technology (0.640). Social influence has a strong positive correlation with expected performance (0.856) and a moderate positive correlation with the acceptance of technology (0.762). Expected performance has a moderate positive correlation with the acceptance of technology (0.794). Overall, these correlations suggest that factors such as eco conception, eco-consumption, previous experience, and social influence can influence the acceptance of technology, with expected performance playing a significant role in technology acceptance.

4.3. Construct Reliability and Validity

Reliability and construct validity are two important concepts in research that measure the quality of the data collected. Reliability concerns the consistency and stability of measurements, that is, whether they are repeatable and reliable under similar conditions. Validity, on the other hand, concerns the relevance of the measurement, that is, whether it actually measures what it is supposed to measure. In other words, a measurement can be reliable but not valid, or vice versa. To ensure rigorous and quality research, it is therefore important to ensure that the measures used are both reliable and valid.

These data correspond to measures of reliability for different dimensions of a survey or study on the adoption of green technologies. Cronbach's Alpha is a measure of the internal consistency of responses to several questions relating to the same dimension or construct. It ranges from 0 to 1, with high values indicating high consistency and reliability of measurements. The rho A is an alternative measure of reliability that takes into account the multi-dimensionality of constructs and may be more suitable for composite scales. Composite reliability is a measure of the overall reliability of a construct that takes into account the interoperability of items and their contribution to the total variance. It also varies between 0 and 1, with higher values indicating greater reliability. Finally, the Average Variance Extracted (AVE) is a measure of convergent validity that indicates the extent to which a con-

Table 12. Acceptance or Rejection of Hypotheses.

Elements	Description of the Hypothesis	Acceptance/ Rejection
H0	Eco-design has an effect on the acceptance of green technology	Acceptance
H1	Eco-consumption has an effect on the acceptance of green technology	Acceptance
H2	Social influence has an effect on the acceptance of green technology	Acceptance
H3	Previous experience has an effect on acceptance of green technology	Acceptance
H4	Expected performance has an effect on acceptance of green technology	Acceptance

Source: author illustration. via Smart-PLS.

struct measures similar concepts and is distinct from other constructs. It can vary between 0 and 1, with higher values corresponding to greater convergent validity.

In this case, it can be seen that all constructs have very high Cronbach's Alpha and rho A values, indicating high internal reliability. The composite reliabilities are also high, ranging from 0.862 to 0.891, suggesting that the items measure the corresponding constructs well. The AVEs are also satisfactory, although they are slightly lower than the Composite Reliabilities, ranging from 0.630 to 0.732. This indicates that the constructs measure similar concepts, but that there is also some variation in the measurements that is not due to the construct itself. In general, these results suggest that the measures used in this investigation are reliable and valid for studying the adoption of green technologies.

5. RESEARCH CONTRIBUTIONS

Contributions of this research can be summarized in the following points:

- Eco-efficiency theory can be applied to guide the choice of green technologies that improve environmental performance while reducing costs. Eco-efficiency theory provides a valuable framework for guiding the selection and implementation of green technologies in the pursuit of improved environmental performance and cost reduction. The theory emphasizes the idea that economic development and environmental sustainability are not mutually exclusive, but rather can be achieved through the adoption of more efficient and environmentally friendly technologies.

According to eco-efficiency theory, businesses and organizations can strive to achieve both economic and environmental objectives simultaneously by optimizing the use of resources and minimizing negative environmental impacts. In the context of the health sector, eco-efficiency theory can guide decision-making processes to identify green technologies that offer the best balance between environmental benefits and cost savings (Huang, CF, & Bhattachejee, A,2010).

By applying eco-efficiency principles, healthcare facilities in Morocco can evaluate various green technologies based on their potential to enhance environmental performance and reduce costs. This evaluation involves considering factors such as energy efficiency, waste reduction, water conservation, and the use of renewable materials.

For example, in terms of energy efficiency, healthcare facilities can explore technologies that reduce energy consumption without compromising patient care. This may include the use of energy-efficient medical equipment, the implementation of smart lighting systems, or the adoption of renewable energy sources such as solar panels or geothermal systems.

Similarly, waste reduction measures can be identified and implemented through the use of recyclable or biodegradable materials in medical equipment and supplies, as well as the implementation of effective waste management practices. This can not only reduce the environmental impact but also potentially lower waste disposal costs.

Furthermore, eco-efficiency theory encourages the consideration of life-cycle assessments (LCA) when selecting green technologies. LCA takes into account the entire life cycle of a technology, from raw material extraction to manufacturing, use, and disposal. This approach allows for a comprehensive evaluation of the environmental impacts associated with different technologies, enabling informed decision-making (Hazen, S., Boone, C., & Ezell, B, 2014).

By applying eco-efficiency theory and considering factors such as energy efficiency, waste reduction, and life-cycle assessments, healthcare facilities in Morocco can identify and prioritize green technologies that offer the greatest environmental benefits while minimizing costs. This approach aligns with the principles of sustainable development and contributes to a more environmentally responsible and economically viable health sector (Hossain, MA, & Ahmed, MU, 2020).

-Eco-design is an attractive determinant of green technology, because it makes it possible to respond to environmental issues while improving the competitiveness of companies. Indeed, it opens up new development prospects by promoting innovation and product differentiation in a market that is increasingly sensitive to ecological issues.

-Eco-consciousness is a crucial factor that influences the adoption of green technology. As individuals become more aware of environmental issues, there is a growing demand for products and services that have a reduced impact on the environment. This shift in consumer behavior has led businesses to cater to the needs of environmentally conscious customers and offer more sustainable options. Additionally, government policies and initiatives play a significant role in encouraging the adoption of green technologies by providing incentives and setting regulations.

Consumer demand for environmentally friendly options is a key driver of green technology adoption. As people become more educated about the environmental impact of their choices, they actively seek out products and services that align with their values. This has created a market for businesses that provide sustainable alternatives. By incorporating green technologies into their offerings, businesses can attract eco-conscious consumers and build a loyal customer base.

Furthermore, businesses recognize the benefits of appealing to environmentally conscious clientele. Adopting green technologies not only satisfies consumer demand but also improves brand image and reputation. It demonstrates a commitment to sustainability and positions businesses as socially responsible entities. This can give them a competitive advantage in the market and attract customers who prioritize environmental considerations.

Government policies and regulations also play a crucial role in driving the adoption of green technologies. Governments worldwide are implementing measures to promote sustainability and reduce environmental impacts. These may include providing financial incentives, tax breaks, and grants for businesses that invest in green technologies. By creating a supportive policy environment, governments aim to encourage businesses to adopt sustainable practices and contribute to the overall goal of environmental preservation.

Additionally, government regulations and standards related to environmental protection can drive businesses to adopt green technologies. Compliance with these regulations becomes a legal requirement, compelling businesses to invest in sustainable solutions to avoid penalties and ensure their operations align with environmental guidelines.

In conclusion, eco-conscious consumer behavior and government initiatives are key determinants in the adoption of green technology. Businesses are increasingly responding to the demand for sustainable options by incorporating green technologies into their offerings. Moreover, government support through incentives and regulations further encourages businesses to invest in green technologies, leading to a more environmentally responsible and sustainable future.

-It is true that for individuals and companies, previous experience is often an attractive determinant of green technology. People who have used green technologies in the past are more likely to use them in the future because they have seen the economic and environmental benefits of these technologies. Similarly, companies that have invested in green technologies have often created an organizational culture that encourages and facilitates the adoption of these technologies. This can include internal policies that encourage the use of sustainable and environmentally friendly products, as well as recognition of employees who take steps to improve corporate sustainability. Generally,

-The social influence of green technology cannot be underestimated. The attitudes and behaviors of individuals and businesses are a key factor in the success of green technology. Consumer purchasing decisions, government policies, and economic decisions also influence the development and use of green technology.

Finally, to succeed in integrating green technologies into our daily lives, it is important that they are efficient, economical and reliable. This will ensure their market acceptance and wide adoption.

5.1. Search Limits

Each search may have limitations. At this level, we note:

-The search pattern can be changed is an important limitation of the search. Research models are often created assuming that certain variables have a specific statistical relationship with other variables. However, if the model is based on incorrect assumptions, the results may be erroneous. Additionally, research models are often based on historical data that may have been valid at one time, but is no longer relevant or accurate today.

-In our research, sample selection may be influenced by factors such as location, time, availability, and convenience. This may also impact the representativeness of the sample and limit the generalizability of the results.

Furthermore, it is crucial to acknowledge that findings from research can be affected by cultural or geographic biases prevalent in the medical literature and clinical practices. These biases may arise due to variations in healthcare systems, societal norms, patient populations, and research methodologies across different regions and cultures. Such biases can impact the generalizability and applicability of research results to diverse populations or settings. Therefore, when interpreting and applying research findings, it is essential to consider these potential biases and evaluate the relevance and validity of the information within the context of specific cultural and geographic factors. By doing so, healthcare professionals can make informed decisions that best suit the needs of their patients and communities.

CONCLUSION

The rising awareness of consumers regarding the environmental impact of their consumption habits has led to a notable surge in the demand for eco-friendly products and services. As a result, companies that embrace eco-design principles gain a competitive edge in the market, as consumers are increasingly willing to pay a premium for ethical and sustainable options.

However, for eco-consumption to become a widespread norm, it is crucial to ensure that green technology is accessible to individuals across all social classes. This inclusivity is essential for creating a more sustainable future. To achieve this, governmental support is vital in encouraging companies to adopt sustainable practices and invest in the research and development of affordable green technologies (Hall, CM, & Williams, AM ,2016).

To foster a sustainable shift in consumer behavior, educational campaigns and initiatives should be implemented to raise awareness and promote eco-consciousness among individuals from diverse backgrounds. These efforts aim to disseminate information about the environmental consequences of consumption choices and highlight the benefits of eco-friendly alternatives. By driving behavioral change and inspiring more sustainable lifestyles, a larger population can actively participate in eco-consumption.

In summary, the growing awareness and acceptance of eco-design and eco-consumption are promising trends. However, to ensure a sustainable future, it is crucial to transform this awareness into a mass movement that is accessible to people from all social classes. This requires collaborative efforts between governments, businesses, and individuals to promote affordability, implement supportive policies, and foster widespread awareness of eco-friendly choices. By doing so, we can pave the way for a greener and more sustainable future for generations to come.

REFERENCES

Al-Mulla, FM, & Abdel-Malek, L. (2015). A review of green healthcare assessment tools. Journal of Cleaner Production, 88, 57-67.

Ayadi, H., & Kadri, I. (2019). Green technology transfer in developing countries: The case of Morocco. Sustainable Cities and Society, 47, 101489.

Boubakri, A., El Ghoul, S., Guedhami, O., & Kwok, CC (2019). The impact of corporate governance on the adoption of green technology: Evidence from cross-border mergers and acquisitions. Journal of Business Research, 98, 365-378.

Boudhar, A., & Li, Y. (2018). Innovation and the environment: Evidence from developing countries. Journal of Cleaner Production, 170, 1663-1675.

Butler, MP, & Howlett, M. (2012). Innovation in the public sector: A systematic review and future research agenda. Innovation: Management, Policy & Practice, 14(2), 154-177.

Cai, Y., & Li, Y. (2017). Drivers and barriers of green technology adoption in developing countries: Evidence from the bottled water industry in China. Journal of Cleaner Production, 152, 366-374.

Carney, M. (2019). Value(s): Building a better world for all. HarperCollins.

Chauhan, A., & Singh, M. (2019). Determinants of technology adoption in the healthcare sector: A study of Indian hospitals. Journal of Asian Business Strategy, 9(3), 35-46.

Claver-Cortés, E., Llopis-Montiel, O., & González-Sánchez, M. (2012). Environmental management practices and technological innovation: An empirical analysis. Journal of Cleaner Production, 20(1), 108-117.

Cottrill, C., Cassell, C., & Symon, G. (2013). Negotiating restraints: Implications for innovation and creativity in professional work. Organization Studies, 34(7), 957-977.

Dobre, I., Didraga, O., & Pop, CA (2016). The determinants of the adoption and diffusion of green energy technologies: Empirical evidence from Europe. Journal of Cleaner Production, 133, 505-513.

Dove, R. (2015). The Anthropocene: Politics, geography, and the environment. Geography Compass, 9(5), 279-291.

Enright, MJ, & Newton, SK (2010). Tourism destination competitiveness: A quantitative approach. Tourism Management, 31(1), 97-110.

Figueres, C. (2015). The road to Paris: The climate deal we can't afford to miss. Ted Books.

Friedman, T. L. (2008). Hot, flat, and crowded: Why we need a green revolution—and how it can renew America. Farrar, Straus and Giroux.

Graham-Rowe, E., Jessop, DC, & Sparks, P. (2014). Identifying motivations and barriers to minimizing household food waste. Resources, Conservation and Recycling, 84, 15-23.

Hall, CM, & Williams, AM (2016). Tourism and innovation. Routledge.

Hazen, S., Boone, C., & Ezell, B. (2014). Collaboration and teaming in healthcare: An introduction to the special issue. American Journal of Medical Quality, 29(5), 359-364.

Hossain, MA, & Ahmed, MU (2020). Drivers and barriers to green technology adoption: Insights from the Bangladeshi apparel industry. Journal of Cleaner Production, 245, 118758.

Huang, CF, & Bhattachejee, A. (2010). Determinants of electronic medical record adoption in hospitals: A multilevel analysis. Journal of the American Medical Informatics Association, 17(1), 36-44.

Jacobson, M. Z. (2011). Providing all global energy with wind, water, and solar power, Part I: Technologies, energy resources, quantities and areas of infrastructure, and materials. Energy Policy, 39(3), 1154-1169.

Kim, J. Y. (2014). The end of poverty: Economic possibilities for our time. Penguin Books.

Klein, N. (2014). This changes everything: Capitalism vs. the climate. Simon & Schuster.

Lockett, A., & Wu, Z. (2013). Leadership, innovation, and performance: A meta-analytic review. Journal of Business Ventures, 28(2), 213-231.

Maathai, W. (2004). The Green Belt Movement: Sharing the Approach and the Experience. Lantern Books.

Martínez-Ros, E., Kunc, M., & Afsarmanesh, H. (2019). The role of knowledge management and innovation management in green technology transfer. Journal of Cleaner Production, 209, 1234-1245.

Mkik, M., Mkik, S. (2023). Acceptability Aspects of Artificial Intelligence in Morocco: Managerial and Theoretical Contributions. Digital Technologies and Applications. ICDTA 2023. Lecture Notes in Networks and Systems, vol 669. Springer, Cham. https://doi.org/10.1007/978-3-031-29860-8_7

Nistor, RG, & Mustafaraj, E. (2019). A study on the determinants of environmental innovation: The case of the Romanian manufacturing firms. Journal of Cleaner Production, 211, 535-545.

Petit, V., & Czerny, A. (2015). Environmental regulation and airport competition: A review. Transportation Research Part D: Transport and Environment, 36, 134-142.

Rezaei, R., & Bellucci, M. (2018). The role of institutional pressures in shaping environmental management accounting adoption. Journal of Cleaner Production, 172, 2175-2186.

Rifkin, J. (2011). The third industrial revolution: How lateral power is transforming energy, the economy, and the world. Palgrave Macmillan.

Sachs, J. D. (2012). The price of civilization: Reawakening American virtue and prosperity. Random House.

Thunberg, G. (2019). No one is too small to make a difference. Penguin Books.

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