



Accessible Tourism in Ecuador: Business Model to Undertake in a Tourist Complex Friendly to All

Gabriel Tite-Cunalata, Diego Carrillo-Rosero and
Félix Díaz-Pompa

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Accessible tourism in Ecuador: business model to undertake in a tourist complex friendly to all

Ing. Gabriel Tite-Cunalata, M. Sc., es investigador y director de Turismo Accesible Tungurahua- Ecuador (Ecuador). (gabrielmtite@gmail.com) (<https://orcid.org/0000-0002-9320-6440>).

Ing. Diego Carrillo, M. Sc., es docente de la carrera de licenciatura en Turismo de la Universidad Regional Autónoma de los Andes, Uniandes- Ambato (Ecuador). (carrillo-diego82@hotmail.com) (<https://orcid.org/0000-0001-6857-4519>).

Lic. Félix Díaz-Pompa, Dr. C., es profesor-investigador y decano de la Facultad de Ciencias Empresariales y Administración de la Universidad de Holguín, Holguín (Cuba). (felixdp1978@gmail.com) (<https://orcid.org/0000-0002-2666-1849>)

Abstract: *The inclusion of people belonging to a priority care group in recent years is increasing in Ecuador. The promotion of labor and social inclusion creates a potential market segment, which for decades was a matter of forgetting and exclusion. This generates that the participation of people with disabilities opens the opportunity to undertake in the field of tourism, since they are considered as multi clients who, in addition, according to studies, make a considerable expense. In addition, it was diagnosed that people with disabilities so far are not adequately satisfied by existing tourism companies, since currently tourism establishments and servers have not greatly innovated their infrastructure to the specific requirements of accessibility and mobility to the environment physical, which are also mandatory according to the Organic Law of disabilities of Ecuador. The investigation concluded that it is feasible to generate a business model on accessible tourism that allows recreation and leisure of all segments, including tourists and priority attention visitors, particularly people with disabilities, since there is an unsatisfied demand that represents a market opportunity to undertake.*

Keywords: Business model, Entrepreneurship, Accessible tourism, Priority attention Tourists and visitors

Resumen: *La inclusión de las personas pertenecientes a grupo de atención prioritaria en los últimos años cada vez es mayor en el Ecuador. El fomento a la inclusión laboral y social origina un potencial segmento de mercado, que por décadas fueron materia de olvido y exclusión. Esto genera que la participación de las personas con discapacidad abra la oportunidad para emprender en el campo del turismo, ya que se consideran como multivalentes que, además, según estudios, realizan un gasto considerable. Además, se diagnosticó que las personas con discapacidad hasta el momento no son debidamente satisfechas por las empresas turísticas existentes, ya que en la actualidad en gran medida los establecimientos y servidores turísticos no han innovado sus infraestructuras a los requerimientos específicos de accesibilidad y movilidad al medio físico, que además son de índole obligatoria según la Ley Orgánica de Discapacidades del Ecuador. La investigación concluyó que es factible generar un modelo de negocios sobre turismo accesible que permita la recreación y ocio de todos los segmentos, incluidos los turistas y visitantes de atención prioritaria, en particular a las personas con discapacidad, puesto que existe una demanda insatisfecha que representa una oportunidad de mercado para emprender.*

Palabras clave: Modelo de negocios, Emprender, Turismo accesible, Turistas y visitantes de atención prioritaria

1. Introduction

Historically, the treatment of priority attention groups, including people with disabilities, was exclusive and invisible. Public policy reform has achieved the transition of inclusion in all dimensions of life before society and comprehensive health care. Accessible tourism begins with the aim of treating the problems associated with accessibility in the hotel infrastructure towards people with physical disabilities (Darcy, 2006).

Accessible tourism manifested itself for the first time in Europe during the 1980s, specifically in the countries of Germany and the United Kingdom that are specialists in universal accessibility ; to then in the 90s is revealed in America, particularly Argentina in Buenos Aires with the "For tourism to the disabled" (Fraiz, Gonzales, and Dominguez, 2008) . In this period this type of tourism focused to study the basic principles of architectural accessibility for wheelchair users on the hotel infrastructure.

Studies show that most people will n a limitation in some stage of their lives and that 30% of the world population will need access to any tourist facility (Darcy and Dickson, 2009). So, it is necessary to work on the basis of accessibility to the environment, develop awareness programs about the importance and need to promote tourism activity aimed at all segments. In this sense, Europe is the pioneer in this trend of tourism, with the support that leisure is a basic human right and no one should be deprived of it for reasons of gender, sexual orientation, age, race, religion, belief, level of health, disability (Millán, 2010) . Most of the tourist infrastructure has accessibility and mobility parameters, the workers who dedicate themselves to this activity have training on care for tourists with disabilities.

Studies on accessible tourism have allowed to proactively develop a strategic approach to managing accessible tourism, it is necessary to develop easy-to-access markets and place these in context for universal design (Darcy, 2010). It is essential to integrate curricula in educational institutions about accessible tourism that allows creating specific competencies in students related to the tourist activity that gives them a better perception of the tools and instruments required for the management of a tourist organization with a view to providing of tourists and visitors with priority attention (Bizjak, Knežević, and Cvetrežnik, 2011) .

From the legislative point of view, public policies were reformed and tourism becomes an activity that all people can access regardless of their abilities, thus enabling full participation and integration with society (Hoyo and Valiente, 2010). Overview of relevant legislation contributes to the development of accessible environments (Darcy, Ambrose, Schweinsberg, & Buhalis, 2011).

Promote tourism experiences to treat them as management implications beyond the visual gaze (Small, Darcy, & Packer, 2012) (Small et al., 2012). As for air transport in Europe on the rights of people with physical disabilities, the Spanish Horizon 2020 Tourism Plan was developed, and which marks the “Actions on transport and tourist mobility” (Fernández, 2012) , which implies a change in the assessment of the person with disabilities, a different and positive view of them, the consideration of their capacities and social adaptations, as well as the conviction of experiencing the same sensations to different tourist proposals and universal accessibility (Palmiotti, 2013) .

Eliminating social stereotypes and change in valuation disabled person can assimilate a different and positive outlook on them, considering their abilities and social adaptation, also the conviction of experiencing the same feelings to different tourist proposals (Palmiotti, 2013). That by integrating accessibility to the tourist environment and public policy, a management model for accessible tourism is complemented (Bifulco and Leone, 2014).

In Europe, people with some physical disability (reduced mobility) can savor the pleasure of touring in a comfortable, convincing and, most importantly, egalitarian way, these conditions are increasingly implanted in society... the association of people with disabilities Together with the city council of each locality, this province is responsible for making accessibility suitable for everyone (Homeaway, 2018) .

In the case of Ecuador, it is one of the countries that prevails from the legislative perspective on priority attention groups, particularly people with disabilities, through the National Development Plan, All Life 2017 - 2021, in its objective 1. It outlines: Guarantee a decent life with equal opportunities for all people, who seek a decent life, that ensures health, (...) employment, rest and leisure (Senplades, 2017).

On the other hand, the National Council for Equality of Disabilities of Ecuador (CONADIS) is the governing and coordinating institution of the policies, plans, programs, execution and fulfillment of the Regulation to the Organic Law of Disabilities and accessible tourism is related in the Article 12. Labor inclusion; Article 13. Accessible tourism; Article 17. Accessibility to the physical environment; Article 18. Accessible transportation units; Article 19. Accessibility to web content; and, Article 20. Sign language (Conadis, 2017). In this way, work is done to include priority attention groups in all dimensions of life, which enables the diversification of activities in the tourism sector.

The accessibility problem in Ecuador was revealed from 2006, in which the Ldo. Lenin Moreno was elected vice president , an event that generated the diligence of priority attention groups, among them people with disabilities, several regulations and laws were reformed that allowed for the inclusion of people belonging to priority attention groups; "Accessibility for people with disabilities and the elderly is non-existent in the Central Andes Region" (Europraxis, 2007) , for which, accessible tourism implies innovations in the tourist infrastructure to diversify the catalog of products and services of tourism organizations.

According to projections, people at some point in life will present a temporary or permanent condition (person with a disability). L to Organization M orld of S ealth (OMT) indicates that more than one billion people have some form of disability, and that 200 million evident problems in its activities. In Ecuador, the Ministry of Public Health (WHO) , until October 24, 2018, records a total of 473 . 768 people with disabilities (Ministry of Public Health of Ecuador, 2018) . In the present investigation, tourists and visitors with priority attention will be those people with some type of permanent or temporary disability.

The total income originated by foreign tourism in all the countries of the world and the cost of international passenger transport reached 1.7 trillion dollars, thus, “ the activity contributes 10.4% of the world Gross Domestic Product (GDP) as a result of the growth of Travel and Tourism by 3.9%, it continues to grow strongly and outperformed the

global economy (3.2%) ” , therefore, it generated one in five new global net jobs created in the last five years within the travel and tourism (Turner, 2019) . Likewise, a count in the income derived from “international tourism has stood at 1.7 trillion dollars, representing 29% of world exports of services and 7% of all exports of goods and services. ” (OMT, 2019).

In Ecuador, 2.8% of the direct contribution of tourism in 2018, with \$ 1,878.7 of foreign exchange earnings, which generated 463,320 jobs in accommodation and restaurant services activities (MINTUR, 2019b) . In the National Tourism Agenda 2030 of Ecuador, objectives and strategies are proposed to boost the country's tourism sector, which allows the development of new trends such as, for example: accessible tourism that encourages the inclusion of tourists and priority attention visitors, among them people with disabilities (MINTUR, 2019a).

At present , attention is given to tourists and visitors with priority attention (people with disabilities in consideration of the United Nations Convention on the Rights of Persons with Disabilities states that " leisure and sport is a right of all " (UN, 2017) The design of control instruments in the application of the Ecuadorian Technical Standard NTE INEN of accessibility and mobility to the physical environment (INEC, 2018) , and innovative tools for the management , development of tourist destinations and products from the perspective of quality, inclusion, and accessibility allow the differentiation of the traditional tourist offer by the accessible and inclusive one, thus, the trend of accessible tourism in Ecuador opens the possibility of tourist inclusion and generates a business opportunity.

Every project begins with the identification of its possible clients, the market segment that will be reached with the good and / or service offered; the quantification of the volume of periodic sales, the projection of that possible market; the definition of the characteristics and attributes of the product, the price, the most suitable distribution channel; the way in which the market of its existence will be made known; and the marketing strategies that best fit the business plan (Olivos, Carrasco, Flores, Moreno, and Nava, 2015) . The business model is a document that identifies, describes and analyzes a business opportunity, examines its viability, and develops the strategies and procedures to turn said opportunity into a specific business project (Zorita, 2016).

The methodology to design an optimal business model: chapter study, methodological design and diagnosis, characterization of the business model, market study, technical-organizational technical study and feasibility study (Corona Gómez et al., 2017)

In tourism activity, quality is an essential factor to achieve organizational competitiveness in the current market, it makes it easier to identify the continuing crisis and uncertainty; quality is obtained as a consequence of adequate integral planning in the organization. The EFQM questionnaire self-evaluates excellence and allows diagnosing: object of study, the current condition of aspects related to leadership, people, processes and strategies and alliances (Carrillo, Acosta, Tite, and Nuñez, 2019). That is, the components of a business plan allow us to identify which methods to use to structure and design an idea to undertake and ensure its profitability, this includes: an executive summary, raising the issue, defining the objectives, identifying the methodology, feasibility studies and execution.

In Ecuador disabilities are classified into the following: physical, intellectual, auditory, visual, language, psychosocial. According to statistical data, there is a registry of 13,976 people with disabilities (CONADIS, 2020)

and the physical and intellectual ones are those with the highest concentration in the province of Tungurahua (Tite, Ochoa, Batista, and Carrillo, 2019) . Which, they become a potential market segment (tourists and visitors with priority attention) for undertaking what is called accessible tourism.

What was analyzed allows us to propose as a study objective: diagnose the current situation of tourism supply and demand in the province of Tungurahua in relation to accessible tourism and design a business model to undertake in a tourist complex that is friendly to everyone, especially tourists and visitors priority attention , particularly to people with physical disabilities in the canton San Pedro de Pelileo.

2. Methodology

For the development of the investigation, scientific methods of theoretical level were applied: historcal-logical, analysis-synthesis and systemic-structural-functional; and empirical level: observation, expert judgment, descriptive and frequency mathematical and statistical methods. For the preparation of the instruments used one methodology to design cutting tools with aspects related to the population to be studied, subjects from whom information and what it seeks to capture is obtained (Hernandez and Velasco, 2000) , they were designed seven mixed questions and three interview guides aimed at different professionals from the Municipal Decentralized Autonomous Government of San Pedro de Pelileo. Data processing was performed using IBM SPSS STATISTICS 22 software, descriptive and frequency statistics were applied (Hoel, 1968).

The interview script consists of five to eight open questions, focused on municipal ordinances to control compliance with the Ecuadorian Technical Standards INEN in tourist establishments, regulations that cover accessible tourism and specific requirements for the construction of tourist establishments with directed services. to tourists and visitors with priority attention, including people with disabilities. Therefore, this technique was applied to public officials of the Municipal GAD San Pedro de Pelileo, Territorial Officer No. 03 CONADIS and a professional civil engineering, in order to clear questions d and research.

According to the 2017 CONADIS survey, in the province of Tungurahua 1,749 labor-active people were registered, which were the universe of study, which after calculating samples considered 316 people with disabilities in the province, as well as, five competent professionals of municipal management. As can be seen in Table 1.

Table 1. Interviewees

Position
Justice lawyer of the Municipal GAD of San Pedro de Pelileo
Technician Tourism of the DAG of San Pedro de Pelileo
Territorial Technician N ° 03 of CONADIS
Territorial Director No. 03 of the MINTU R
Department of Cadastre of the Municipal GAD of Cevallos

Data collection was conducted from October 2017 - July 2018. During recopilation of information surveys were applied individually, collectively and data are corroborated with personal interviews with directors governmental and civil engineer. For the analysis of results, IBM STATISTICS 22 software was used. Next, the phases applied in the collection and analysis of the results are detailed:

- Phase 1: Design of the questionnaire.
- Phase 2: Validation of the questionnaire.
- Phase 3: Application of the questionnaire.
- Phase 4: Tabulation.
- Phase 5: Systematization.
- Phase 6: Analysis and interpretation of results.

3. Results

3.1 Characterization of the business model

Name: “El Olimpo del Ángel” Tourist Complex.

The name of the tourist complex, in the first instance, is due to the word " Olympus " , according to Greek mythology, it is the resting place of the Gods , these deities are warriors, each with their unique characteristics; It is why, people with disabilities are considered warriors of life, because despite its limitations can have a normal life, if society provides an inclusive culture that facilitates the development of habilities.

The next word that gives the establishment its name is "Angel", this figure is a supernatural, spiritual or immaterial being, who is attributed qualities such as beauty, innocence or goodness; Thus, this term refers to children with disabilities. All that said, the resort's name refers to people with disabilities, older adults, and children.

Slogan: “ A tourist complex friendly to all ”, and makes mention of the accessible and inclusive culture that the tourist complex will promote through a catalog of products and services designed according to the specific requirements of the Ecuadorian Technical Regulations for accessibility and mobility to the environment physical , which will allow the enjoyment of all tourists and visitors, including those with priority attention (people with disabilities) .

Location: The tourist complex will be located in the Guantugsumo sector in San Pedro de Pelileo, Tungurahua, Ecuador. It is important to clarify that the business model is flexible to any territorial space.

3.2 Description of the product or service you offer

The “El Olimpo del Ángel” Tourist Complex will offer the following leisure and creation services : swimming pool with access facilities for tourists and visitors with priority attention (people with physical disabilities - wheelchair users), sauna, Turkish baths, drawer, hydromassage, mixed sports courts; which were considered according to the results of the field research, in addition, they will comply with the Ecuadorian Technical Standards NTE INEN of accessibility and mobility to the physical environment.

Among the recreational activities: gastronomic workshops will be offered at least four times a month to people from seven years old and up, with student interns from the Regional Autonomous University of the Andes "UNIANDES". Similarly, painting workshops will be held at least 4 times a month, with professionals from the Casa de la Cultura Ambato and the Department of Culture of the GAD Municipal de San Pedro de Pelileo.

About accessibility services, the business model is based on the requirements of the Ecuadorian Technical Standard NTE - INEN for accessibility and mobility to the physical environment. For example: for the corridors with access to ramps, the Ecuadorian Technical Standard NTE INEN 2245, first revision 2016-06, is considered to ensure the optimal movement and mobility factor of tourists and visitors of priority attention, the tourist complex will have roads to facilitate the movement of the user, these roads will have an inclination of up to 20 ° in order to facilitate the movement of those who use wheelchairs ”.

The swimming's pools adults and children are designed based on loading.gif INEN 2929 2014-XX, on bathing establishments, requirements for the provision of the service. As these are the elements with the greatest attraction in a tourist complex, it is essential to design spaces that facilitate mobility and user enjoyment; Thus, to enter the pools, there will be user access ramps with wheelchairs and bars around the pools. Also, it is important to highlight the implementation of access elevators for those with physical disabilities.

The Sauna, Turkish, drawer and whirlpool baths must resort to the Ecuadorian Technical Standard NTE INEN 2929 2014-XX, on spa establishments, requirements for the provision of the service, the places will be adapted with wide paths that allow the mobility of people with chairs wheel; while the walls will have bars to avoid accidents.

The locker room area will be built according to the Ecuadorian Technical Standard NTE INEN 2 293: 2001, on accessibility for people with disabilities and reduced mobility to the physical environment. Sanitary hygienic area, the spaces will also be coupled to facilitate the mobility of users; the locker rooms will have a bar to one side of the space and a sloping ramp that allows access for people with wheelchairs.

In the green and recreational areas they will be used for sports activities, dance therapy and relaxation exercises.

The hygienic services will be innovated according to the Ecuadorian Technical Standards - NTE INEN 2293, first revision 015-xx, on accessibility for people with disabilities and reduced mobility to the physical environment, sanitary hygiene area, the bathrooms will be suitable for the use of people with disabilities. The space will have movement facilitating harnesses.

The bathtubs will be implemented according to the Ecuadorian Technical Standard NTE INEN 2 293: 2001, on accessibility for people with disabilities and reduced mobility to the physical environment, sanitary hygienic area, like the previous spaces, this is spacious, each bathtub is conditioned with a movement barrier and access ramps for tourists and visitors with priority attention, in particular for wheelchair users.

The parking area will be planned according to the Ecuadorian Technical Standard NTE INEN 2248 First revision 2016-10, on, accessibility of people to the physical environment, parking, will be located near the entrance of the reception of the tourist complex.

The signage will be applied according to the Ecuadorian Technical Standard NTE INEN 2854 2015-04, on accessibility of people to the physical environment, signage for people with visual disabilities in urban spaces and in buildings with access to the public, it is important to note that auditory perception is the sense with greater development; therefore, auditory warning signs and information will be implemented to facilitate your movement, with the intention of facilitating your orientation and mobility. All the signals will be reproduced in a period of thirty minutes.

- Auditory signal: Access to swimming pools, sauna, steam room, whirlpool.
- Auditory signal: Access to changing rooms.
- Auditory signal: Entrance and exit to the tourist complex (reception).
- Auditory signal: Access to green spaces.

3.3 Plan strategic institutional development

Mission: To be an accessible tourist complex that provides optimal and quality services through a competitive staff, by promoting an inclusive and accessible culture in all facilities; in such a way that it satisfies the needs and expectations of all clients, including tourists and visitors with priority attention.

- Vision: To be considered a tourist establishment that is friendly to all, inclusive and accessible in the national market with quality and competitive services, by integrating all clients, including tourists and visitors with priority attention (people with disabilities).

The values that the tourist complex emphasizes are the following:

- Commitment: It is directed towards customers, offering an optimal and quality service in each of the activities carried out within the tourist complex.
- Respect: Allow harmonious social interaction between the team that is part of the tourist complex, tourists and visitors with priority attention; as well as respect for their families.
- Equality: It is considered that tourists and visitors with priority attention constitute an emerging mitigation of society itself, it is important to highlight that everyone can be part of personal autonomy, as long as equitable access is provided.
- Inclusion: Promote the inclusion of all clients in an inclusive and responsible environment.

- Participation: Promote the incorporation of tourists and visitors with priority attention in all the activities offered by the tourist complex, which guarantees meeting their expectations, safety and well-being.
- Quality: By offering quality services and fully complying with user demands.

Shareholder policies:

- Prepare, socialize and establish clauses and agreements structured by the board of directors; and, formalize before a constitutional notary.
- The shareholders will receive the profits according to the amount invested and to the clauses of the established agreements.
- Hold quarterly meetings with the shareholders and the manager of the tourist complex, in order to report the status of their investments.
- The majority shareholders will obtain benefits regarding the use of the facilities once a month.
- Shareholders may hold positions within the organization of the tourist complex.

Supplier policies:

- The supplies will be received on the fifth of each month, in the event of an event, notify the maintenance department with a period of 48 hours.
- The order of supplies will be made monthly.
- Invoices for tax returns will be received in the maximum accounting department until the 25th of each month.
- An annual membership for two people will be awarded to the best provider.
- Establish good working relationships.

Policies for staff:

- The personnel who work in the tourist complex must show ethical and moral behavior.
- The staff must be aware of the requirements of people with disabilities.
- Provide an optimal and efficient service, carrying out each of the processes and taking care of customer behavior.
- The labor roles of the tourist complex are poly functional; for this reason, no employee can reject the activities entrusted to him.
- Develop periodic evaluations of the customer service processes in the tourist complex.
- Promote worker and user safety.

- Satisfy user expectations and needs through process optimization.

Customer policies:

- Verify the absence of physical barriers to users with disabilities.
- Request users to fill out the survey that will be located at the reception in order to verify and ensure the quality of the services provided and the excellent service.
- Facilitate access to all people, regardless of their physical condition and / or limitations.
- Build a customer database.
- Send birthday congratulations letters by different means, these can be: *e-mail*, *"WhatsApp"*, *"Facebook"* or phone calls.
- Motivate repeated visits, giving you a 10% discount for the second visit.

Policies for society:

- Promote social-tourist inclusion through agreements with foundations of people with disabilities at the level of the province of Tungurahua, in order to promote their participation in the community
- Suppress social stereotypes and give rise to the social inclusion of tourists and visitors with priority attention.

3.4. Possible strategies

To design the business model strategies, it is important to carry out a SWOT analysis, as detailed in table 2.

Table 2. FODA matrix

Strengths	Opportunities
<ul style="list-style-type: none"> ✓ Project manager has a CONADIS card. ✓ Market study. ✓ Strategic plan. ✓ Previo Previous analysis of legal documents of the Ecuadorian Technical Norms NTE INEN of accessibility and mobility. ✓ Database of people with disabilities in the province of Tungurahua. ✓ Project manager is a specialist in Accessible Tourism 	<ul style="list-style-type: none"> ✓ Art. 12. Labor inclusion. Organizes Law of Disabilities ✓ Art. 13. Accessible Tourism. Organic Law of Disabilities. ✓ Ecuadorian Technical Standards NTE INEN - Accessibility and Mobility. ✓ Accessible Tourism Network worldwide ✓ Guilds of people with disabilities. ✓ Government financial entities that promote the change of the productive matrix.
<ul style="list-style-type: none"> ✓ Weaknesses 	<ul style="list-style-type: none"> ✓ Threats
<ul style="list-style-type: none"> ✓ C new tourist omplex in the local market. 	<ul style="list-style-type: none"> ✓ ✓ In the San Pedro de Pelileo canton there is no municipal ordinance that

<ul style="list-style-type: none"> ✓ Lack of infrastructure. ✓ Insufficient shareholders. ✓ There is no client portfolio. ✓ Inexperience in the inclusive tourism sector. 	<p>requires compliance with the Ecuadorian Technical Regulations NTE INEN on accessibility and mobility to the physical environment.</p> <ul style="list-style-type: none"> ✓ Creation of tourist complexes with the same or similar services. ✓ Substitute products from the Baños de Agua Santa canton. ✓ Investor disinterest in this type of projects. ✓ Unstable economic situation in the country.
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After the analysis, each context was diagnosed, with the purpose of designing strategies that allow the efficient development of the business model, each of them is cited below:

FO strategies

- ✓ Design a *Customer Relationship Management* (CRM) promotion plan that allows direct contact with the customer.
- ✓ Socialize the business model through the different accessible tourism networks worldwide, to encourage and attract investors.

Izar Socialize the business model in impactful scientific magazines, in order to contribute to the scientific development of accessible tourism.

DO strategies

- ✓ Propose strategic alliances with the National Council for Equality of Disabilities (CONADIS); National Federation of Ecuadorians with Physical Disabilities (FENEDIF) in its Accessible Tourism project in Ecuador.
- ✓ Design the architectural plans according to the indications of the project with the Ecuadorian Technical Regulation NTE INEN of accessibility and mobility to the physical environment.

FA strategies

- ✓ Develop a new feasibility study that allows access to financing.

DA strategies

- ✓ Propose to the team of councilors of the Municipal GAD of San Pedro de Pelileo the structuring and execution of a municipal ordinance that requires compliance and control of the Ecuadorian Technical Standard NTE INEN of accessibility and physical mobility of existing tourist establishments and to be built.

3.5. Current and potential clients

In the present business model, current clients are non-existent, since the project has not been executed; However, potential clients for the "El Olimpo del Ángel" Tourist Complex are addressed to those families who want recreation and leisure services, but above all to tourists and visitors with priority attention among them: families that have a person disabled; which, allows to improve the quality of life through the inclusion and participation of activities in equal conditions.

The theoretical foundation of the work and the contextualization of the problem, allowed gathering information issued by CONADIS in the year 2020 regarding the number of registered persons with disabilities; and, official data issued by the National Institute of Statistics and Cense (INEC) regarding the number of people per family nucleus. These data allowed calculating a universe of 46,648 people, which is the result of: 13,976 people registered with CONADIS until March 2020 \times 3.8, which is equivalent to the family nucleus per person.

Then we used the results of field research on those who perform at their leisure tourism and infers a potential market of 41,850 people and is calculated as follows: initial universe (53,108) minus 21.20% (11,258) who responded never travel for leisure and recreation. Therefore, the potential demand is established at 26,611 people with and without disabilities; and we obtain from the subtraction of 36.65% (15,239) the potential market (41,850) among those people who answered rarely in reference to Is your free time dedicated to activities related to tourism? (25.26%), as can be seen in figure 1; and 11.39% of people who are not interested in visiting the San Pedro de Pelileo canton, for tourist and recreational reasons, as can be seen in figure 2.

3.6. Market study

3.6.1. Offer

For the study of the offer, the 2018 Cadastre of the Tungurahua province is considered and a diagnosis is made through the direct observation of the tourist establishments that have the specific requirements of accessibility and mobility to the physical environment according to the Ecuadorian Technical Regulation NTE INEN. In Table 3, which details the tourist servers with an inclusive and accessible offer. Likewise, nine tourist servers that have accessibility and mobility facilities to the physical environment were identified during the study, as was shown in Table 4.

Table 3. Tourist servers of the province of Tungurahua

Tourist servers				
No.	Name	Location	Inclusive services	Cost for recreational services
1	Team Adventure	Baños, Oriente and Tomas Halflants.	Extreme sports. (Rafting, canopy, bungee jumping).	Canopy \$ 7.50 Chiva \$ 5.00 Extreme ball \$ 20.00 Rafting \$ 20.00
2	Wonderfull-Ecuador	Oriente & Pedro Vicente Maldonado, Baños	Extreme sports. (Rafting, canopy, bungee	Rafting \$ 25.00 Canopy \$ 25.00 Chiva \$ 5.00

		de Agua Santa.	jumping).	
3	Kamikaze Canopy Zipline	Oriente 12389 Maldonado	Swing, extreme ball and double canopy	Extreme ball \$ 20.00
4	Chinchin Tarabita	Mantle of the Bride in Baños	Tarabita	\$ 2.00
5	Eduardo's Ecology and Adventure	Baños de Agua Santa, 12 November S / N and Velasco Ibarra	Hiking and food	\$ 5.00
6	Paragliding school "TUNGURAHUA"	Niton Sector, Pelileo	Inclusive paraglider	\$ 60.00

Source: (Tite, 2018).

Table 4. Tourist establishments with parameters for tourists and visitors with priority attention (people with disabilities)

Tourist establishments that meet accessibility and mobility parameters to the physical environment				
No.	Name	Location	Accessible services	Cost for recreational services
1	Emperador Hotel	Ambato, Cevallos Avenue.	Accommodation and recreational services	Lodging \$ 89.00 Spa \$ 20.00
2	Hotel Mary Carmen	Ambato, Pedro Fermín Cevallos and Luis A. Martínez.	Accommodation and recreational services	Lodging \$ 70.00 Spa \$ 20.00
3	Samari Spa Resort	Avda. De las Amazonas Km. 1 via al puyo	Lodging, food, recreational services.	Lodging \$ 85.00 Spa \$ 25.00
4	Las Granadillas Accessible Hostel.	Baños, Caserío Iluchi	Lodging, food.	\$ 50.00
5	Luna Runtun The Adventure	Baños de Agua Santa, via Runtun km 6	Lodging, food, recreational services.	\$ 169.00 full package
6	Quinta de Juan Montalvo	Ambato, Los Guaytambos Avenue,	Trails and casa mueso	\$ 1.50 national \$ 2.00 foreigners
7	Quinta De Juan Leon Mera	Ambato, Atocha, Dr. Rodrigo Pachano Lalama	Trails and casa mueso	\$ 1.50 national \$ 2.00 foreigners
8	Quinta La Liria	Ambato, Atocha, Dr. Rodrigo Pachano Lalama.	Trails and casa mueso	\$ 1.50 national \$ 2.00 foreigners

9	Recreational Tourist Complex "La Moya"	Pelileo Grande-La Moya	Trekking	Free
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Source: (Tite, 2018).

Therefore, there are 15 tourist establishments and servers that are considered for the study of the offer; It can be concluded that there is no tourist complex within this list that includes n services for tourists and visitors with priority attention (people with disabilities), despite a notorious and acceptable potential market.

In this sense, the Tourist Complex "El Olimpo del Ángel" focuses on generating an optimal business model with the purpose of offering innovative leisure and recreation services for all clients, particularly with accessibility and mobility standards for the physical environment for tourists and visitors with priority attention (people with disabilities); for the selection of the facilities, the results of the field research were analyzed; and, the suggestions were taken into account, which for the respondents constitute a very important (5) and important (4) facility; such as: Swimming pool for children and adults with accessibility for tourists and visitors with priority attention, including people with physical and motor disabilities (5), accessible children's games (4), as can be seen in the results in table N ° 5 . It also considered the service bathroom sauna, steam, whirlpool, bath drawer, inclusive mixed courts (4); and, a restaurant with innovations for gastronomic workshops, the results can be seen in table N ° 6 .

Table 5. Accessible tourist services

Value	Swimming pool with access to people with physical disabilities	Childish games	Equine therapy	Volleyball court	Trails and walks
1	22	32	25	84	40
2	27	39	117	26	51
3	35	32	31	123	99
4	108	128	45	44	79
5	125	85	98	39	47
Total:	316	316	316	316	316
Qualification:	5	4	2	3	3
Symbology:	Very important	Important	Less important	Modernly important	Modernly important

Table 6 . Accessible recreational workshops

Value	Gastronomic workshops	Art workshops	Chess workshops
1	Four. Five	73	75
2	43	57	78
3	61	97	88
4	89	47	42
5	78	42	33

Total:	316	316	316
Qualification:	4	3	3
Symbology:	Important	Modernly important	Modernly important

3.6.2. Demand

In this business model, it does not have current clients, given that it is a project to be executed; however, the annual effective demand is declared in 26,611 people with and without disabilities. With the results obtained in the field research questions, question 12 that refers to tourist spending and question 13, with the frequency of trips for tourism reasons, it is determined that the demand amounts to 26,557.5 travelers and \$ 398,322.5. Table 7 details the calculation of general demand in dollars and trips.

Table 7. Study of general demand in dollars and travel

Potential demand	Travel frequency for tourism reasons - Qualitative (FC)	Frequency of trips for tourism reasons - Quantitative or (FCT)	Results of the frequency of trips for tourism reasons (Figure 3)	Number of Safe Journeys ((Potential demand * FC T) * Results of the frequency of trips for tourism reasons)	Tourist expenditure (Question 12)	General Demand in dollars (number of trips * tourist expense)
26,611	monthly	12	46,1	12,267.6	\$ 15 , 00	\$ 184,015
26,611	quarterly	4	20,8	5,535	\$ 15.00	\$ 83,026.3
26,611	biannual	two	8,4	2,235.3	\$ 15.00	\$ 33,529.8
26,611	Anual	one	24,5	6,519.6	\$ 15.00	\$ 97,795.42
		Total:	100%	26,557.5		\$ 398,322.5

Source: (Tite, 2018).

The effective monthly demand for the Tourist Complex "El Olimpo del Ángel" was established at 1,859 and is the result of the division of the number of trips for the 12 months that a year contains. In addition, it demands effective weekly includes in 464 people. Table 8 details the calculation of effective demand for the "El Olimpo del Ángel" Tourist Complex.

Table 8. Demand effective travel for " El Olimpo del Ángel".

Description	Quantity
Total number of trips or effective demand	26,557.5
Monthly effective demand (Number of travelers / 12)	1.859
Demand effective weekly (demand effective a monthly / 4 weeks of the month)	464
Effective demand for weekends (weekly effective demand 464 * 60 %)	278

Through the calculations made, it can be determined that the effective weekly travel demand is estimated at 464, useful data to carry out the technical study of capacity and load, basing the feasibility to undertake the El Olimpo del Ángel Tourist Complex, specialized for all types of clients, including tourists and visitors with priority attention.

3.7. Technical and organizational study

3.7.1. Optimal Size

To determine the minimum capacity of the project, data from the weekly projected demand study (304.6 people) are used in consideration of the number of travelers (Table 8), for which, it must be taken into account that, in general people usually go to tourist establishments on Friday, Saturday and Sunday, it is estimated 60%, that is, 278 people (effective weekly demand 464 * 60%), the rest (186 people) are estimated between days of the week, important data to develop the study of the optimal size of the "Tourist Complex" El Olimpo del Ángel".

The capacity load of 1 Tourist Complex Olympus of the Angel, is considered to 152 places the dry zone, between the restaurant and multiple fields; and 55 seats for 1 to wet area, between pool, bathroom sauna, bathroom steam, tub and bath drawer (Table 9). Useful data for further calculations.

Table 9. Dry and wet area capacity

Dry area	Capacity	Wet area	Capacity
Restaurant	51	Swimming pool	2.3
Multiple courts	51	Sauna bath	10
Green areas	25	Turkish bath	10
Childish games	25	Hydromassage	8
Total	152	Drawer baths	4
		Total	55

3.7.2. Organizational analysis

The structural organization comprises five professional plant and four under contracts for services. As can be seen in figure N° 05. The plant personnel must be multifaceted and flexible when faced with any recommendation. Three annual trainings will be held

for staff, with topics on care for tourists with disabilities, biosafety protocols, and tourist psychology, in order to foster an inclusive culture.

Next, the functions manual that was designed for the administrator is shown, which details the competences that the person in charge of the administration of the El Olimpo del Ángel Tourist Complex must have”, as can be seen in t open 1 0.

Table 10. Administrator Features Manual

Establishment:	Tourist Complex "El Olimpo del Ángel"	Department:	administrative
Area:	Management	Salary:	\$ 650,00
Position:	Administrator	Required safety equipment:	
Number of place in office:	One	Biosecurity team Ergonomic chair Ergonomic mouse First aid kit	
Job functions:			
<ul style="list-style-type: none"> ✓ Promote a good work environment ✓ Delegate functions to staff ✓ Make strategic alliances with local institutions (MINTUR, FENEDIF, CONADIS, GADs) ✓ Management by processes cross is ✓ Manage training: attention to tourists and priority attention visitors, positive language, first aid, psychology of the demand for accessible tourism, Ecuadorian Technical Regulations on accessibility and mobility to the physical environment ✓ Evaluate staff performance ✓ Evaluate the financial reports of the establishment ✓ Convene and meet with representatives of unions belonging to priority attention groups ✓ Reading daily reports ✓ Design and cite memoranda to employees when the case warrants ✓ Design the marketing and advertising plan ✓ Ability to adapt and audacity to resolve situations that arise ✓ Study to Innovate the catalog of products and services for tourists and visitors with priority attention ✓ Supervise daily the different areas of the tourist complex ✓ Design and implement biosafety protocols ✓ Organize meetings with the Ibero-American Network of Accessible Tourism 			
Produced by:	Accessible Tourism research team Tungurahua- Ecuador	Authorized by: Ing. Gabriel Tite M. Sc.	
Date:	Updated May 2020		

3.8. Feasibility study

3.8.1 Investment

Investment for building; and acquisition of machinery, computer equipment, appliances and other household goods of the project is estimated \$ 5 00,000.00 ; deferred assets are

added (operating permits, advertising and labeling) \$ 4,800.00; and working capital projection for three months (wages, utilities, raw materials, maintenance) \$ 8,139.45, therefore, the initial investment for the innovative project is \$ 814,502.75 (Table 11).

Table 11. Initial investment

INITIAL INVESTMENT		
Heading	Amount	%
Fixed assets	\$ 500000,00	9 8 %
Deferred assets	\$ 4,800.00	1 %
Working capital (3 months of operation)	\$ 9,702.75	1 %
Total	\$ 514.502 ,75	100%

3.8.2. Net present value

The net present value is estimated \$ 563,892.40 projection 10 years exceeding the initial investment (\$ 512,939.45), with the minimum acceptable yield rate of 11% of the yield, by thus determined the to undertake feasibility in creating a resort friendly with all customers, including tourists and visitors of priority attention, including people with disabilities.

3.8.3. Internal rate of return

The internal rate of return was determined using the IRR formula in the Excel software with the final cash flow results (Table 12) and comprises 13 % that exceeds 6.22% of the passive credit rate, this data guarantees that the model of business get their required performance. This result helps to increase the net present value of the company.

3.8.4. Recovery of investment

It is an instrument that allows the measurement of the time period required for the net cash flows of an investment to recover its initial cost or investment. The Investment Recovery Period is considered an indicator that measures both the liquidity of the project and the relative risk since it allows anticipating events in the short term (Vázquez, 2010). The recovery of the investment of the business model is estimated through the diagnosis of the final cash flow (Table 12) and it is determined that, in six years and one month. It will be a new establishment with services for all clients, including those tourists and visitors with priority attention.

Table 12. Final cash flow

Years	Cash flow	Accumulated
0	-512,939.45	-512,939.45
1	69,318.19	-443,621.26
2	77,957.30	-365,663.95
3	83,884.19	-281,779.77

4	90,069.92	-191.709.85
5	104,666.88	-87,042.96
6	103,270.33	16,227.36
7	110312.86	126,540.22
8	117,670.03	244.,210.25
9	125,357.55	369 567.80
10	133,391.94	502,959.74

4. Conclusions and discussion

The business model is economically feasible and profitable, since the internal rate of return is 13 % that exceeds the passive rate of credit and a projected net present value at 10 years.

In the business model d the study of the market allowed us to identify the current status of supply and demand determine the market segment and calculate investment to estimate whether to undertake the in Tourism project to ccesible par to all segments and especially to tourists and visitors with priority attention, including people with disabilities.

An effective demand of 26,557.5 travelers in ideal situations of competition was determined considering the 15 tourist organizations with specific requirements to provide recreation and leisure services for all clients, including tourists and visitors with priority attention (people with disabilities).

The business model requires an investment of \$ 512,939.45, comprising between assets \$ 5 00.000 working capital designed for three months \$ 9702.75; and deferred assets \$ 4,800.00, for which funding of required 500 000.00. The effective operational flows are positive in all the periods of the project, the equilibrium point is reached from the first year and the period of return on investment is fulfilled from year 6 with one month.

In general conclusion , the business model to undertake the creation of a friendly tourist complex in the canton of San Pedro de Pelileo, is feasible and profitable, since there is a potential market that has not yet been responsibly exploited , the business model It adjusts to the needs of recreation and leisure for all segments, especially tourists and visitors with priority attention, including people with disabilities, and agrees to comply with the specific requirements established in the specific legal and technical norm.

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