## Lazarillo







# Profiling Businesses in the Care Economy

The care economy consists of paid and unpaid labor and services that support caregiving in all its forms. In Africa, Asia and Latin America, women spend between three to five times as many hours on unpaid care and domestic work as men. This represents 80 percent of a household's total hours devoted to unpaid care work.

Care economy businesses can help recognize, redistribute, reduce and reward – also known as the 4 Rs – unpaid and paid care and domestic work in the following ways:



**Recognize:** Initiatives that increase visibility and recognition of paid and unpaid care and domestic activity as "productive" work that creates real value and contributes to economies and societies.



**Redistribute:** Services and initiatives that redistribute care work from individuals to public and private sector entities, and redistribute care and domestic work within the household.



**Reduce:** Products and initiatives that reduce the time spent on and burden of unpaid care and domestic work.



**Reward:** Products, services and initiatives that ensure that care and domestic workers are paid fairly and have professional growth potential. This provides them with financial reward and security.

The Care Economy Knowledge Hub aims to address the knowledge gap around care businesses by showcasing various business models and creating a resource base for relevant stakeholders. It also aims to raise awareness and increase knowledge of the state of impact-driven care economy business models and attract a broad range of funders to invest in care economy solutions by showcasing opportunities. These business profiles are intended to showcase said potential investment opportunities. They have been created from information and data provided by the business itself.

This project is supported by Canada's International Development Research Center, in partnership with the Soros Economic Development Fund at the Open Society Foundations. Building on their track record and commitment to transforming the care economy and mobilizing finance for gender equality, they have jointly launched this action research program to help transform the care economy through impact business and investment.



## **Executive Summary**



Lazarillo is a for-profit Chilean enterprise that operates in over 45 countries. Its mission is to promote the autonomy and independence of people with blindness and visual impairment, so they may independently perform day-to-day activities. Lazarillo creates custom digital maps for businesses,<sup>1</sup> government institutions,<sup>2</sup> and non-profit organizations, via its mapping software platform.<sup>3</sup> These maps help to address spatial orientation issues<sup>4</sup> for people with blindness and visual impairment by introducing a space, facilitating internal navigation, as well as locating the closest public transportation. Customers are able to incorporate Lazarillo maps into their websites, as well as institutional or commercial applications. In addition, Lazarillo integrates all interior (paid maps) and exterior (unpaid maps) onto its free smartphone application.

The Lazarillo app is an assistive technology<sup>5</sup> solution for people with blindness and visual impairment that enables them to perform day-to-day activities, such as grocery shopping, visiting the doctor, studying, and working with complete independence. The app provides indoor navigation for on-site mobility, video call assistance for online shopping, as well as outdoor navigation and geolocation. Further, in enhancing the autonomy of persons with blindness or visual impairments, the Lazarillo app reduces time spent on care by household members or permanent caregivers.

To date, Lazarillo has 31 business customers in Chile, Mexico, Costa Rica, the United States, Spain, the United Kingdom, and Qatar. It has served 250,000 people with blindness and visual impairment worldwide (45% women and 55% men) and is available in over 25 languages. In 2021 the company generated US\$ 190,000 in revenue and currently has 20 employees.

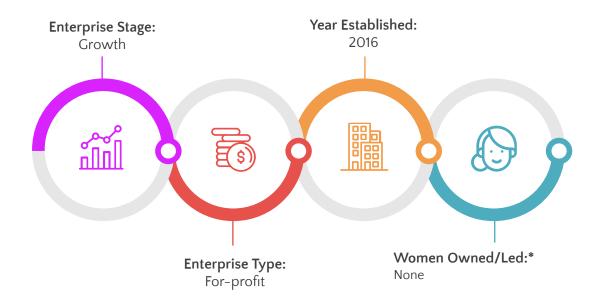
<sup>&</sup>lt;sup>1</sup> Businesses include: healthcare facilities, residential buildings, malls, museums, universities, and banks.

<sup>&</sup>lt;sup>2</sup> Governmental institutions include: city mayor offices, city departments of transportation and mobility.

<sup>&</sup>lt;sup>3</sup> The Customized Mapping Software Platform is a map drawing software that processes and analyzes large amounts of data to display them on a tailored map.

<sup>&</sup>lt;sup>4</sup> Spatial orientation issues refer to issues navigating through their environment when walking or driving.

<sup>&</sup>lt;sup>5</sup> Assistive technology is an umbrella term covering the technology used by individuals with disabilities in order to perform functions that might otherwise be difficult or impossible.



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## 1. About The Enterprise

#### 1.1 Problem

Approximately 596 million people worldwide are affected by some form of visual impairment. Of this, at least 43 million are completely blind, 295 million have some moderate-to-severe loss of sight, and 258 million suffer from mild vision impairment.<sup>6</sup> Estimates suggest that global visual impairment will reach 895 million people by 2050, of which 61 million people will be blind, due to population aging, growth, and urbanization.<sup>7</sup> The increasing number of blind and visually-impaired people translates into greater demand for care support and services.

<sup>\*</sup> According to 2X "women entrepreneurship" and "women leadership" criteria; 2X Challenge Criteria

<sup>&</sup>lt;sup>6</sup> International Agency for the Prevention of Blindness. (2022). Vision atlas: magnitude and projections. Retrieved from <a href="https://www.iapb.org/learn/vision-atlas/solutions/">https://www.iapb.org/learn/vision-atlas/solutions/</a>

<sup>&</sup>lt;sup>7</sup> Burton, M. J., Ramke, J., Marques, A. P., Bourne, R. R., Congdon, N., Jones, I., ... & Faal, H. B. (2021). The Lancet global health Commission on global eye health: vision beyond 2020. The Lancet Global Health, 9(4), e489-e551.



Research suggests that around 80% of facilities are inaccessible for people with visual impairments and the remaining 20% are considered only partially accessible.<sup>8</sup> Numerous cities have adapted their public areas to facilitate mobility, accessibility. and safety for those with vision impairment. However, due to the prevalence of standard maze-like<sup>9</sup> designs of business and public facilities,<sup>10</sup> accessibility continues to be a challenge for the blind and visually impaired.<sup>11</sup> Similarly, data suggests that approximately 70% of internet websites do not offer full accessibility for the blind and visually impaired,<sup>12</sup> limiting their access to digital spaces.

There are several apps that offer navigation systems for visually impaired people, however, most of these systems are limited in their capabilities. They are not built to provide seamless direction both indoors and outdoors and few provide dynamic interactions<sup>13</sup> and adaptability to change.<sup>14</sup> Thus, these tools cannot provide the blind and visually impaired with all of the information and features necessary for comprehensive, safe, mobility.<sup>15</sup> While there are more accurate, efficient, and reliable assistive technology apps, they are often very expensive and therefore not considered accessible for low-income individuals.<sup>16</sup> This shortage of affordable assistive technology for people with blindness and visual impairments translates into a significant barrier to functioning with complete independence while performing daily activities, as well as limits quality of life.<sup>17</sup>

Evidence reveals that people with blindness and visual impairment face multiple barriers to personal and professional growth as a result of a generalized lack of awareness, incorrect assumptions, and outdated preconceptions about sight loss.<sup>18</sup> These prejudices affect businesses' abilities to hire potential candidates with blindness and visual impairment,<sup>19</sup>

<sup>&</sup>lt;sup>6</sup> International Agency for the Prevention of Blindness. (2022). Vision atlas: magnitude and projections. Retrieved from <a href="https://www.iapb.org/learn/vision-atlas/solutions/">https://www.iapb.org/learn/vision-atlas/solutions/</a>

<sup>&</sup>lt;sup>7</sup> Burton, M. J., Ramke, J., Marques, A. P., Bourne, R. R., Congdon, N., Jones, I., ... & Faal, H. B. (2021). The Lancet global health Commission on global eye health: vision beyond 2020. The Lancet Global Health, 9(4), e489-e551.

<sup>&</sup>lt;sup>8</sup> Giudice, G. L., & Catalá, A. (Eds.). (2020). Visual Impairment and Blindness: What We Know and What We Have to Know. BoD-Books on Demand.

<sup>&</sup>lt;sup>9</sup> Maze-like refers to a confusing network of intercommunicating paths or passages.

<sup>&</sup>lt;sup>10</sup> Montarzino, A., Robertson, B., Aspinall, P., Ambrecht, A., Findlay, C., Hine, J., & Dhillon, B. (2007). The impact of mobility and public transport on the independence of visually impaired people. Visual Impairment Research, 9(2-3), 67-82.

<sup>&</sup>lt;sup>11</sup> Carpman, J. R., & Grant, M. A. (2016). Design that cares: Planning health facilities for patients and visitors. John Wiley & Sons.

 $<sup>^{12}</sup>$  Wettemann, R., & White, T. (2019). Nucleus research Note: The internet is unavailable.

 $<sup>^{\</sup>rm 13}$  Dynamic Interactions enable several components on the same app page to interact with each other.

<sup>&</sup>lt;sup>14</sup> Ran, L., Helal, S., & Moore, S. (2004, March). Drishti: an integrated indoor/outdoor blind navigation system and service. In Second IEEE Annual Conference on Pervasive Computing and Communications, 2004. Proceedings of the (pp. 23–30). IEEE.

<sup>&</sup>lt;sup>15</sup> Elmannai, W., & Elleithy, K. (2017). Sensor-based assistive devices for visually-impaired people: Current status, challenges, and future directions.

<sup>&</sup>lt;sup>16</sup> Elmannai, W., & Elleithy, K. (2017). Sensor-based assistive devices for visually-impaired people: Current status, challenges, and future directions. Sensors, 17(3), 565.

<sup>&</sup>lt;sup>17</sup> WHO and UNICEF. (2022). The Global Report on Assistive Technology. Retrieved from: https://www.who.int/news/item/16-05-2022-almost-one-billion-children-and-adults-with-disabilities-and-older-persons-in-need-of-assistive-technology-denied-access--according-to-new-report

<sup>&</sup>lt;sup>18</sup> Demmin, D. L., & Silverstein, S. M. (2020). Visual impairment and mental health: unmet needs and treatment options. Clinical Ophthalmology (Auckland, NZ), 14, 4229. the future.

<sup>&</sup>lt;sup>19</sup> Chhabra, G. (2021). Turning a blind eye to employers' discrimination? Attitudinal barrier perceptions of vision impaired youth from Oslo and Delhi. Disability & Society, 36(10), 1688-1711.



limiting their access to employment opportunities and professional development. Moreover, these outdated preconceptions often translate into businesses' being unable to meaningfully support staff and customers with disabilities. This can lead to reputational backlash, as poor experiences highlight a lack of awareness or dedication to inclusion.<sup>20</sup>

An additional consequence of sight loss is the need for close supervision and/or constant care from family members or hired workers.<sup>21</sup> However, dedicating time to care work or hiring a full-time care worker is not always affordable for many low-income households. Thus, household members (primarily women) bear the majority of caregiving responsibilities.<sup>22</sup> Furthermore, research reveals that female caregivers to the visually impaired appear to be at a greater risk for depression.<sup>23</sup> This is an important point, as women comprise 70.8% of all caregivers for the visually impaired.<sup>24</sup>

#### 1.2 Solution

Lazarillo provides digital mapping services including indoor (Wayfinding) and outdoor maps to businesses, government institutions,<sup>26</sup> and non-profit organizations. These maps are designed through a customized mapping software platform,<sup>27</sup> allowing the company to ensure high data accuracy. As each customer generally requires multiple locations to be mapped, the scalability of the service allows for great outreach. In addition, Lazarillo provides an e-commerce intermediary service that allows businesses to provide online shopping assistance to their customers (with blindness and visual impairments) via video call, in the Lazarillo app. These services improve accessibility to products and platforms, as well as enable persons with visual impairments to participate in both digital and physical spaces that are not generally accessible.

Lazarillo automatically integrates all maps commissioned by businesses, government institutions, and non-profit organizations (as well as free exterior maps) onto its free app. The Lazarillo app is an assistive technology<sup>28</sup> app designed as a multipurpose platform, featuring both a navigation system and automated features in over 25 languages. This assistive technology app allows blind and visually impaired persons of any income level to perform daily activities with complete independence and autonomy, improving their overall functioning and quality of life. The app also offers precise geolocation information via real-time audio guidance. This is particularly useful for streets, intersections, public transit routes, building entrances, and parking lots. Likewise, the app

<sup>&</sup>lt;sup>20</sup> RNIB.(2018). Blind people reveal the biggest barrier they face in everyday life. Retrieved from <a href="https://www.rnib.org.uk/about-us/media-centre/latest-media-releases/blind-people-reveal-biggest-challenge">https://www.rnib.org.uk/about-us/media-centre/latest-media-releases/blind-people-reveal-biggest-challenge</a>

<sup>&</sup>lt;sup>21</sup> National Academies of Sciences, Engineering, and Medicine. (2017). Making eye health a population health imperative: Vision for tomorrow. National Academies Press.

<sup>&</sup>lt;sup>22</sup> Braich, P. S., Lal, V., Hollands, S., & Almeida, D. R. (2012). Burden and depression in the caregivers of blind patients in India. Ophthalmology, 119(2), 221-226.

<sup>&</sup>lt;sup>23</sup> Kuriakose, R. K., Khan, Z., Almeida, D. R., & Braich, P. S. (2017). Depression and burden among the caregivers of visually impaired patients: a systematic review. International Ophthalmology, 37(3), 767-777.

<sup>&</sup>lt;sup>24</sup> Bambara, J. K., Owsley, C., Wadley, V., Martin, R., Porter, C., & Dreer, L. E. (2009). Family caregiver social problem-solving abilities and adjustment to caring for a relative with vision loss. Investigative ophthalmology & visual science, 50(4), 1585-1592.

<sup>&</sup>lt;sup>25</sup> Businesses include: healthcare facilities, residential buildings, malls, museums, universities, and banks.

<sup>&</sup>lt;sup>26</sup> Governmental institutions include: city mayor offices, city departments of transportation and mobility.

<sup>&</sup>lt;sup>27</sup> The Customized Mapping Software Platform is a map drawing software that processes and analyzes large amounts of data to display them on a tailored map.

<sup>&</sup>lt;sup>28</sup> Assistive technology is an umbrella term covering the technology used by individuals with disabilities in order to perform functions that might otherwise be difficult or impossible.



provides indoor maps<sup>29</sup> of public facilities such as medical centers, supermarkets, and universities. While inside, users are sent access instructions to lead them to reception desks, exam rooms, restrooms, offices, classrooms, and stores. The app also sends real-time alerts to blind and visually impaired pedestrians, warning them about potential obstacles along their route. According to Lazarillo, tasks such as visiting the doctor have been reduced from 2 hours to 30 minutes (on average). To date, Lazarillo has mapped around 42,535 interior<sup>30</sup> and exterior locations worldwide, including: universities, banks, train stations, government offices, streets, metro lines, and bus routes.

In addition, Lazarillo provides training to businesses, government institutions, and non-profit organizations. These trainings have two main objectives: (i) addressing the lack of awareness about sight loss, in order to contribute to the elimination of prejudices regarding visually impaired employees. The training does so by introducing inclusive workplace policies to businesses and organizations, which in turn increases access to employment opportunities for people with blindness and vision impairment; (ii) improving the quality of customer service that businesses and their staff (especially sales representatives) provide to their customers with visual impairments. This training focuses on how to approach and support visually impaired people in person or by phone, improving their overall customer experience.

Lazarillo's services aim to enhance the independence and autonomy of people with blindness and visual impairment. This increase in independence translates into less of a need for permanent support and supervision from caregivers in order to perform daily activities. Caregivers, mainly women, often report high levels of depression associated with said care activities, thus Lazarillo likewise works to alleviate workloads and decrease these risks.

<sup>30</sup> The interior mappings are paid under its B2B model.

<sup>&</sup>lt;sup>29</sup> Internal maps are only available for facilities that have the indoor Wayfinding service.



## 1.3 Customer Segment

Customer Segment	Product / Service Provided	Paid / Unpaid
Businesses, government institutions, and non-profit organizations	<ul> <li>Indoor Wayfinding mapping and outdoor maps: Lazarillo creates tailored maps to facilitate navigation and space orientation inside facilities such as: hospitals, metro stations and lines, bus routes, government offices, universities, malls, medical centers, financial institutions, museums, residential buildings, and parking lots. The indoor Wayfinding service is powered by Bluetooth Beacon<sup>31</sup> technology. Given its high data accuracy, it ensures that businesses' and organizations' customers receive precise navigation information.</li> <li>Training: This service offers training on the inclusion of persons with disabilities in work spaces to businesses, public institutions, and non-profit organizations. There is a specific focus on how staff can support people with blindness and vision impairment adequately, both by phone and in person.</li> <li>Connection with e-commerce: This service allows businesses and organizations to address the varying needs of customers with disabilities, not only the visually impaired.<sup>32</sup> It does so by providing product descriptions via video calls with trained sales representatives on the Lazarillo app.</li> </ul>	Paid: All services for businesses, government institutions, and non-profit organizations are delivered through B2B contracts. Contracts are tailored to specific business needs and can include 1, 2, or all of the services described.
People with blindness and vision impairment	<ul> <li>Exploration: This service sends real-time voice messages to users, with contextual analyses of locations and their external surroundings. For example, the nearest intersections, public transportation stops, or places of interest: restaurants, cafes, ATMs, banks, and stores. Businesses with Lazarillo indoor Wayfinding<sup>33</sup> are highlighted first, to increase accessibility. As people with blindness and vision impairment walk, the app updates essential information about their surroundings.</li> </ul>	Unpaid: People with blindness and vision impairment have free access to the app. It requires a smartphone and an internet connection. <sup>34</sup>

<sup>&</sup>lt;sup>31</sup> Beacons are small, wireless transmitters that use low-energy Bluetooth technology to send signals to other smart devices nearby. These signals are used to navigate through different places. While GPS works better outdoors and provides users with locations with an accuracy of 1–50 meters, Beacons can work indoors or outdoors and can achieve finer precision. See De Oliveira, L. C., Andrade, A. O., De Oliveira, E. C., Soares, A., Cardoso, A., & Lamounier, E. (2017, February). Indoor navigation with mobile augmented reality and beacon technology for wheelchair users. In 2017 IEEE EMBS International Conference on Biomedical & Health Informatics (BHI) (pp. 37-40). IEEE.

<sup>&</sup>lt;sup>32</sup> While the primary customer segment is people with blindness and visual impairment, the Lazarillo app has benefited (unintendedly) people with limited mobility.

<sup>&</sup>lt;sup>33</sup> Indoor Wayfinding allows users to find their way in and around any large indoor space using only their smartphones through Beacon Technology. For Beacon technology see Footnote 31.

<sup>&</sup>lt;sup>34</sup> Since the Lazarillo app requires internet connection, this can limit its access for very low-income segments. Lazarillo is attempting to establish partnerships with internet service providers so that the app can continue to function without the need for mobile data (offline).



Customer Segment	Product / Service Provided	Paid / Unpaid
	It also detects their speed and can therefore automatically transition into vehicle mode. In addition, thanks to partnerships with multiple micro-mobility <sup>35</sup> companies, such as TIER Mobility, LYFT, and VOI, blind and visually impaired pedestrians receive alerts when a scooter or a bicycle is close-by or misplaced, preventing potential accidents.  Routes: This service includes several features to streamline traveling to a specific location, such as regular alerts via voice message and turn-by-turn directions with detailed information about intersections. The Lazarillo app is compatible with most map applications and can even request an Uber. In addition, Lazarillo can be integrated into a city's public transport system, in order to create more accessible transportation options for people with blindness and vision impairment.  Search for locations: This service enables users to request specific addresses, sorted under categories such as restaurants, health centers, and means of transportation.  Indoor navigation and geolocation: This service includes interior navigation of facilities that choose to integrate indoor <i>Wayfinding</i> services. It allows people with blindness and vision impairment to navigate inside buildings like universities, museums, hospitals, medical centers, financial institutions, metro stations, and government buildings. The app provides guidance for quick access to reception desks,	Paid / Unpaid
	exam rooms, bathrooms, offices, classrooms, and stores.  Moreover, people with blindness and vision impairment can choose between walking and wheelchair-accessible routes, depending on their mobility conditions.	
	• Online shopping: This service connects people with blindness and vision impairment with trained sales representatives in facilities such as retail shops, grocery stores, and home furnishing retailers. Representatives are also able to provide video or audio assistance, to support online shopping.	

 $<sup>^{\</sup>rm 35}$  Micro mobility refers to short-distance transport, usually less than 5 miles.



#### 1.4 Team And Governance Structure

Lazarillo currently has 16 full-time employees serving on the administrative and development teams: 5 women, 2 of whom are in leadership roles, and 11 men. In addition, 4 part-time employees (all men). Three men in leadership positions have some form of vision impairment. The board of directors is composed of the CEO/co-founder and two additional co-founders, all of whom are men. Two angel investors will join the board. Additionally, the company has an advisory committee composed of investors.

## 1.5 Enterprise Policies

Policy	Yes / No	
Overall HR Policy		
Equal pay for equivalent work policy		
Non-discrimination / Equal employment opportunity / Diversity and inclusion policy (gender, LGBTQ, PWD, etc.)		
Anti bullying and sexual harassment policy / Respectful workplaces		
Whistleblower policy / Employee grievance mechanism		
Maternity / Paternity leave policy		
Safeguarding policies for vulnerable groups (children, elderly, PWDs)		
Safeguarding policies for the environment or to reduce detrimental impact on the environment (covers reducing carbon footprint, reduced water consumption etc.)		

## 2. Impact

#### 2.1 Mission Statement

Lazarillo's mission is to create technology that promotes the autonomy and independence of people with visual impairments in order to perform day-to-day activities.



## 2.2 Intended Impact

Lazarillo currently creates the following impact:

• It **reduces** the time households must dedicate to unpaid care work, or the need for hired support, as the assistive technologies promote independence and autonomy.

## 2.3 Monitoring And Measurement

Lazarillo measures the following indicators for service outreach:

- Number of registered users on the app: measured by the app
- Number of customers (businesses, government institutions, and non-profit organizations) paying for the mapping services
- Number of locations mapped
- Number of kilometers traveled per user (in real-time) while using the app: measured by the app

In terms of quality of the services provided by the app, Lazarillo measures:

User satisfaction: annual surveys sent via Google forms to users

### 2.4 Results To Date

Lazarillo's outreach results from 2016 to 2021 (worldwide) are as follows:

- Number of users registered in the app: 250,000
- Number of customers (businesses, government institutions, and non-profit organizations) paying for the mapping services: 34
- Number of instructors that participated in workshops: 170
- Number of businesses' staff that received training: 670
- Number of locations mapped: 42,535

Lazarillo's work is aligned with the following Sustainable Development Goals (SDGs):









## 3. Financials

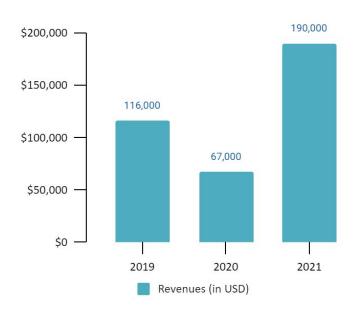
#### 3.1 Financial Status

Lazarillo is financially sustainable and expects to be profitable in the next three years. The company is currently expanding the number of places mapped, as well as the number of employees, which has resulted in an increase in costs.

(Amounts in US\$)	FY 2019	FY 2020	FY2021	FY2022
Total Revenue	116,000	67,000	190,000	347,725
Total Expenses	176,965	156,059	255,977	205,817
EBITDA OR Profit/Loss	-60,965	-89,059	-65,997	141,908
EBITDA Margin	-52.5%	-132.9%	-34.72%	40.8%

#### 3.1.1 Revenue Streams

Lazarillo's revenue comes from the offered mapping services businesses, non-profits, and public organizations. The graphic below depicts past revenue as reported by Lazarillo, with 100% of its revenue coming from commercial operations. Between 2019 and 2020 Lazarillo's revenue decreased by 42% due to the COVID-19 pandemic. However, between 2020 and 2021, it grew by 184%. The Lazarillo app generates no revenue, as its usage is completely free





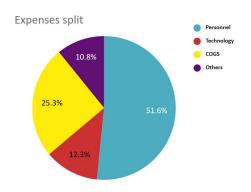
## 3.1.2 Expenses

The following pie chart provides details of key expenditure areas by Lazarillo in 2021.

Personnel: 51.6%Technology: 12.3%

COGS/Cost of raw materials: 25.3%

• Other: 10.8%



## 3.2 External Funding Sources (Past and Current)

Lazarillo has raised a total of US\$110,000 in private funding, led by three key accelerators: AcceliCITY, Magical startups, and the Tampa Bay wave. Further, additional funding came from two venture capital investors, Amarena Capital and Invexor, as well as five angel investors in the form of SAFE notes.<sup>36</sup> Lazarillo has received US\$95,400 in debt-type investment from Nesst (a soft debt with no interest) and FIS Ameris Capital (a debt-type investment). Furthermore, Lazarillo has received a total of US\$230,000 in grants from Corfo, a Chilean governmental organization.

As of the end of 2022, Lazarillo is closing a new round of funding that will include US\$1 million in venture capital investment (in the form of SAFE notes) led by Amarena Capital.

## 3.3 Challenges Faced In Accessing Capital

Lazarillo's main financial challenges are related to capital availability and accessibility.

- Lazarillo, like most early-stage startups, lacked network connections or investors to provide them with venture capital. This absence, therefore, limited the company's ability to raise external capital.
- There are few impact-investing funds based in Latin America and therefore insufficient
  ability to meet the capital demand from Latin American companies. In addition, the
  processes are often difficult to grasp and time-consuming. This lack of an efficient
  impact-investing "ecosystem" has become a significant barrier for Lazarillo to
  successfully access external capital.
- During Lazarillo's early stages, the business model lacked maturity, making it less attractive to investors. Most frequently, investors prefer to invest in companies that are further along in their development.
- Lazarillo is currently closing a new round of investment. However, due to reduced growth and instabilities in the global economy in 2022, capital availability has decreased.

<sup>&</sup>lt;sup>36</sup> SAFE note (simple agreement for future equity) acts as a legally binding promise to allow an investor to purchase a specified number of shares for an agreed-upon price at some point in the future.



## 4. Path To Scalability

## **4.1 Potential Avenues For Growth**

Lazarillo is seeking to grow the number of customers, as well as integrate more services.

- **Development of new services:** Lazarillo seeks to build partnerships with internet providers, allowing the app to continue to work without mobile data (offline). The first country that will implement this service will be Peru.
- Geographic expansion: In the short term, Lazarillo seeks to increase the number of clients in the United States. The company plans on beginning this expansion in 2023.

## 4.2 Risks And Challenges

- Regulatory framework: Lazarillo often benefits from strong regulatory frameworks on accessibility in public and private spaces, as well as inclusivity, as businesses are required to meet these regulations. However, not every country has a regulatory structure regarding accessibility. The absence of regulations was an important challenge for Lazarillo to expand its customer base in such countries, as businesses may fail to understand the need or benefit of becoming more inclusive and accessible. Lazarillo addressed this challenge by pivoting its business model to focus on what matters the most for private companies: customer experience and satisfaction. Public sector actors still tend to invest primarily in services related to inclusivity and accessibility, even if there is no regulation in place requiring it.
- Operational (IT): Lazarillo's mapping software can be integrated with customers' existing software. As both programs are interconnected, Lazarillo must ensure that its software is secure and stable, so that it does not interfere with the customer's software functionality. This is a challenge, as Lazarillo's software must be adapted to be compatible with all customers' software programs.
- Social norms: Private and public actors continue to experience a lack of knowledge and awareness about sight loss and inclusive policies, which translates into low investment in accessibility solutions for people with visual impairment.
- Competition: While there are other companies that offer mapping services, they do not focus specifically on accessibility and inclusivity, nor are they free, giving Lazarillo a significant competitive advantage. However, there are other assistive technology applications in the market with features that Lazarillo lacks, such as cameras.



## 4.3 COVID-19 Impact On The Enterprise

As a result of the COVID-19 pandemic, Lazarillo has identified the following impacts: (i) a decrease in investment capital; (ii) a decrease in the number of services requested; (iii) a decrease in the number of new clients; and (iv) delays in product installments/payments, as facilities were closed. However, the COVID-19 pandemic enabled the detection of weaknesses in the business model (such as vulnerability to the situation of the world economy), which contributed to the growth of the current company's business plan.

## 4.4 Support Received To Date

Lazarillo has received technical assistance support from three incubators and accelerators: Tampa Bay Wave, Magical Startups, and Starta New York. In addition, the Complex Engineering Systems Institute (ISCI) assisted with product development.

## 4.5 Inputs Required For Growth

- **Financial support:** Lazarillo is seeking US\$5 million to increase its operations and expand geographically in the United States.
- Non-financial support: Lazarillo is particularly interested in strategies and connections to increase its network of potential customers, in particular, malls, hospitals, and universities.